# Strategic Orientation in students with high academic avarage in the University of San Francisco Xavier de Chuquisaca

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To analyze the preference in the learning approach of students with high academic performance, at the University of San Francisco Xavier de Chuquisaca. Subjects and methods. The study was conducted on 392 students with high and high average academic performance of the faculties of health sciences, social, economic and technology at University of San Francisco Xavier [Sucre, Bolivia]. The questionnaire ASSIST Entwistle [1993] was applied, which evaluates the approaches or approximations of students to studying. SPSS V.21 with Chi square, Student T and Crosstabs was used in the statistical processing. Results. The preference for the study approach differs by gender; there is more preference for the strategic approach on females and for deep approach on males. This increased preference for strategic approach shows the use of organizing techniques of study, awareness to the demands of the tasks, achievements and effectiveness monitoring and, in the case of males the use of evidence and interest in ideas. Conclusions. The learning approach has important gender differences and their relationship to high performance is significant. It shows the need to think of a differentiated pedagogy that enhances the techniques that each group applies.

**ASSIST. Learning approaches, Academic performance**

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## Introduction

The present study is based on one of the most international concepts the "strategic learning". In the academia both researchers and educators have a daily challenge the how to increase the level of ownership, maintenance and implementation of a specific content and approaches of how to learn and teach in this new historical period.

Begin by noting that the national university context have been dedicated numerous events to the discussion of how to optimize the process of facilitating learning; However, some authors (1,2) have failed passive learning methodologies, focusing on the teaching and learning process from the traditional role of keynote presentations with the culture of sitting in classrooms, passively listening to the lesson, take notes , absorb, repeat and take periodic tests to certify their learning.

Educators need to incorporate into our daily lives based on good scientific information, how the brain learns, (2) in an attempt to learn more and go deeper into the brain theory at this particular historical period, where changes in access and provision of information are plentiful.

From various theories of learning psychology has sought to explain how individuals learn the content for its application and from the perspective of psychophysiology, the term learning refers to the process by which experiences change the nervous system and therefore, the behavior. (3); also assumed (4) that from a procedural point of view is not possible to separate learning memory, nor it is possible to make a distinction within the neuronal circuit.

From the theories of constructivist psychology, when talking about learning, one of the most cited concepts is the "learning to learn" (5) learning and memory are complex processes for more than a century challenge both researchers and teachers to understand the mechanisms involved.

The study presented is based on the constructivist approach that learning is a process of making meaning where the student is considered as an active and inventive that seeks to construct the meaning of the contents, taking a leading, independent, self-regulated and effective role (6) that knows how to plan, regulate, evaluate and optimize their cognitive processes to respond to an emerging demand for a context.

The concept of performance and knowledge acquisition must be profoundly transformed since it is known that both the strategies and skills are related to learning to learn, whereas in this process the education system is not neutral and favors the development of more reflective theoretical students and more practical. (7)

The term strategic learning (8) in the global context appears as one of the educational psychology principles underlying the new arena of higher education because as important as learning what is certain is, that learning, improving contents procedures and strategies to continue learning throughout life. It is known that effective thinkers, put least attention to determined cognitive performance in relation to the underlying structure, mentally process and strategies that enable such achievements.

This is why it is very important to know what strategies students apply to guide more accurately the teaching and learning process.

In the case of Bolivia, higher education has gone through more traditional paradigms of Pavlovian classical behaviorism in the IXX century, through the instrumental models of SkinnerXX and Watson, later in this century venture into more models as Piaget and Ausubel constructivist and social of Vigotsky including some of its postulates that are currently holding the Act of Education Reform Elizardo Siñani and Avelino Perez (9).

In its wide dimension process involves learning as personal, not personal and context in which it develops components. In that sense it is stressed that learning (10) turns out to be a complex, diversified, highly influenced by factors such as the developmental characteristics of the learner, the situations and the socio - cultural in learning, content types or aspects of reality which must appropriate, the resources available and the level of intentionality, consciousness and organization among others; such factors are important to analyze, students with effective performance that makes students distinguish with the ineffective.

This concept considers the involvement of several categories of analysis and this research seeks to deepen the role that have the processing and organizing information; fact that is gaining much importance and therefore the attention of researchers has been directed to analyzing the activities learn, retain and recall.

It was said that traditional teaching at the University is aimed at imparting knowledge (1.2) relating to a particular subject and learning, most often rote (12). For domestic authors (13) university training processes have been characterized by interest focus on the objectives and content in the underlying processes, rather than on the processes involved in it.

Note that universities in the country in general management in 2011 and 2012 have made significant reforms in the case of the University of San Francisco Xavier de Chuquisaca, in 2011, has put in place a new academic model (14), based on a socio-systemic approach outlined in chapter IV on specific targets for training stresses the importance of incorporating appropriate methods. Thus the findings of the various events of higher education (15,16, 17) indicate that oriented and creativity as the linchpin to promote self learning and educational innovation generation must improve education. (18)

The perception of context is very important for several authors (10,11, 20, 22) and with the Entwistle model (25) shows how different learning environments can interact with the characteristics of learners affecting learning and guidance academic results, and the types of strategies that apply to this learning approach will be different

In attetion to the different studies related to this ítem, some variables are followed by Gutiérrez (2008) (26): the academic goals, qualifications, self-concept, academic achievement, gender, conceptions of learning and motivation among others.

During the profesional formation according to the students who are coursing will be a greater verbal and numerical process, but studies are inconclusive, considering them the most important.

Entwistle and Tait said, cited by Marin (20) that there are differences in the learning environment preferred among students of different careers, or how the assessment preferred by students is related to the orientations of study, strategies or processes of study and motivation.

Regarding to the hypothesis of the approaches applied to academic performance studies shows that there exists significant correlation between deep and achieving approaches and the academic qualifications (69) Gargallo (70) Valley (71).

To Beltrán and Barriga (72) there is a relationship between approaches to learning and academic performance. Deep learning (meaningful guidance approaches) with high scores (high yield) surface learning approach to low scores (low performance) is associated.A significant relationship between low scores with superficial approaches and high scores with deeper approaches.

The background in terms of academic performance and learning approaches are also different, they emphasizes to Abalde (73) approaches orientation to meaning and understanding, get a good academic performance to Broc (56) the 2011 that best discriminated between performance groups (high, medium and low) are learning variables such as time management, effort regulation and metacognitive self-regulation. De la Fuente (74) there is a positive relationship between deep strategy with the procedural performance.

To Salmerón (44) achievement goals approximation and self-regulation strategies are related to academic performance. Students from health sciences and engineering have high scores on achievement goals and strategies for self-regulation approach. Oriented approaches are correlated with the middle and high academic achievement.

Barca; (69) The Source (74) noted that there were higher ratios between deep focus and self-awareness for self-regulated learning and academic achievement, to Pérez Villalobos (75) results showed low ratios between deep learning approach and strategies for resource management and organization of time, but other authors highlight reasons associated with rewards, such as finding a good job or a good social position, maintaining positive relationships with the use of cognitive and self-regulatory strategies. Valle et al. (76).

Therefore, this author (54) states that academic results are more related to achievement goals, characterized as the concern of the student for the performance itself, with goals of learning, characterized by behaviors aimed at improving knowledge and desire to learn, but that is not the main objective of achieving good academic results.

To Broc (56) a higher performance, a lower incentive of a negative base, the negative feelings and the emotions related to oneself related to the task and visualization of negative consequences in a failure situation, are bigger.

Cabanach (54) in their studies says thart there is more influence of the achievement goals and the external attributions are the internal attributions and the academic self-concept, belief that academic results are due to internal factors (ability, effort) and perceived as competent have a direct, positive and meaningful way on academic performance.

To Broc (56) there is low correlation between some volitional variables and academic performance through its direct relationship with metacognitive strategies that supposedly mobilized and put into operation.Following these results (54) also influence the cognitive performance, variables such as metacognitive strategies; and other motivational variables such as motivational strategies and motivational regulation strategies.

Metacognitive variables are correlated with performance, such as time management and effort regulation, and incentives carryforwards, which constitute a volitional variable. Broc (56) there are no differences in volitional variables

Note that students does not adopt prototype approaches. The characteristics that define this group can probably have some correspondence with some studies on motivation called "work avoidance goals" and avoidance motivation, which is a type of motivational orientation identified in academic contexts that differs on two types of targets usually not considered (learning and performance). Valle et al. (40).

To Salas (66) high academic achievement would be associated with the strategic focus and deep, Valle, 1997 (40) emphasizes that the deep approach is related to intrinsic motivation. But Salim (77) preference for deep T approach does not necessarily generate good academic results and but stresses could make tasks with deep approaches, higher expectations of success in the various tasks and show academic achievement levels significantly higher.

Deep learning approaches and achievement tend to be associated with high academic achievement. Abalde 2009 (73) noted that in this study and their learning processes study, obtained a strong positive and significant correlation with high academic performance but also is said that (69) pupils in average yield and high motives and strategies adopted deep and achievement.

Oriented approaches to the meaning or understanding with one goal: obtaining a good or high academic achievement and a lesser extent, the superficial approach when orientation is related to poor performance or academic performance. There is an inverse relationship in the motives and strategies of deep and surface learning used by students in their study and learning processes. Abalde (73).

Cano (43) notes that there are higher scores by students with profound processing styles (learning significantly, comparing, conceptualizing ...) and top scores for the students with methodical learning style (learning in an organized manner, using classical study skills). Abalde (73).

Valle et al suggested. (76) finding a positive social value may be a reason to promote a strategic implication. There are other goals that promote involvement in the study, as seeking approval, or the intention to highlight the strengths and own abilities.

Broc (56) indicates that the differences in these variables are given between the group of higher performance with the medium and low, but not between the medium and low performance, which suggests the importance of the proper functioning of these variables in the highlights and do not with volitional variables that do not discriminate between the three groups of students performance.

For other authors as Hernandez (67) note that in the deep approach there is a clear consistency between the motives and strategies used, some college students with profound motivation could make use of surface strategies if the demands of the institution require them, students with superficial motivation can use deep strategies with subsequent help from the teacher.

Regarding the hypothesis of implementing the approach and Salas gender (66) indicates that men are more related to the strategic approach and the clearer while women relate more to the deep approach, which increased in both sexes with age, and Broc (56) states there are no differences in learning Barca variable (42) highlights multicultural consistency and coherence between surface approach and academic underachievement and Abalde (73) embodying indicaque the students with superficial learning achieved academic ow performance.The intention can be to understood (deep focus), but the evaluation fosters change in the approach to adopt (superficial). Salim (77).

Salim (77) emphasizes the value of cultural context what appears as 'surface' is achievement and that would explain a high value of superficial motivations and strategies of top performers.González et al., (54) suggested that shallow and deep focus are exclusive and planning is a strategy that does not correlate with shallow focus Perez (75) nor with external regulation Camarero. (27).

Regarding the superficial approach Salim (77) emphasizes that the transition in style deep surface could be explained as an attempt to meet the demands and perceived as an improvement in their learning strategies, the evaluation and accreditation of knowledge. Students adjust their approach according to the demands (strategic adaptability).

Salmeron (44) suggests that future studies should examine the influence of contextual variables on achievement goals, self-regulation strategies and academic performance. Note that all strategies for learning are high correlations with approaches / styles meaning orientation. Support strategies and coding which gets higher coefficients. Barca (42).

Regarding the metacognitive self-regulation also correlated with stress reduction actions, these being larger and more effective as this increasing and vice versa. Broc (56).

Metacognitive self-regulation is negatively correlated with negative incentive bases. It is likely that when there is an adequate self-regulation does not appear in their cognitive and affective system such self emotional representations of failure or fear. The correlations showed a similar pattern in the variable time management and effort regulation. Broc. (56).

Valle et al., (76) notes that in addition to the learning-oriented goals, other goals (oriented social assessment and the achievement of a good employment situation in the future) that promote the use of strategies and involvement in the study.

The goals oriented to lead the involvement in the study derived from a defense of self and those derived from a search of improved self-esteem are also significantly related to the use of cognitive strategies and self-study. . Valle et al, (76) Boat (42) in the approximation of the student's interplay of three key elements: intent (motive) of the learner, the process used (strategy) and achievements obtained (yield).

The implication for interest in studies and the acquisition of competence and personal control reasons would be able to secure a strategic information processing study and self-regulated academic performance. Valle et al., (76), to this author is a positive relationship between the component approach to performance goals, strategic information processing and self-regulation of the learning process. "Try to do better than others."

However more research, as Brophy notes quoted by Valle et al., (76) would be needed to understand the true extent of the prospect of "multiple targets" taken from everyday classroom practice.

The results shown in the Medical Career Veliz (78) noted that students not only not became more strategic, but tended to be superficial and shallower in their approaches to learning because over time, unlike the results reported in this paper, is less interested in the ideas and made less use of evidence during his apprenticeship, similar results in the group of students who apply strategic focus throughout the career in a 2012 study.

Instead Escanero (79) states that in the case of these students enrolled in the final year, their learning is related to professional practice which apparently determines greater strategic direction regardless of sex. It is possible to plan and monitor their actions and process information strategically in areas that do not like them but it is know they need each other to achieve goals that are important or interesting to them, to achieve a good record, get a good job. Valle et al. (76)

Know and understand how students approach or focus their learning getting greater success in the academic process.

The research question is: Does the approach to learning of students with high academic performance in the different faculties of the Universidad San Francisco Xavier de Chuquisaca is preferably strategic?

The general objective is to analyze the approach to learning of students with high academic performance in the faculties of the Universidad San Francisco Xavier de Chuquisaca.

**Material and methods**

The research paradigm is positivist, while seeking to demonstrate the relationship between the study variables.

The process is supported by the use of quantitative methods and techniques that will be explained later in more detail.

Quality criteria search rigor in terms of external validity and uses the previous theory, generating contrasting hypotheses. Barrantes (120). In this research preference levels are evaluated in the implementation of certain learning strategies in students with high academic performance.

In methodological approach is quantitative, where considers the alternation between moments of induction (going direct to the theory model) and other deductible (ranging from theory to specific) and vice versa; (121) is suggested by Newman and Benz (121) for whom a recursive between theory and empirical evidence and vice versa is possible prosecution process.

In the process, quantitative methods for the processing of information will be applied and shall be supplemented with analysis, synthesis, induction and deduction, in view of this, quantitative and objective variables will be analyzed like test scores of the steps 2009 to 2012.

Study is correlational Hernandez (120) because it has aimed to evaluate the statistical relationship between variables such as strategies and approaches to learning of students in the four areas of knowledge.

The study by temporal scope is transversal, or synchronous.

According to its purpose, is an applied research and with its depth in a kind of ideographic research (123) emphasizes the particular limited to students with high and medium academic achievement at the University of San Francisco Xavier de Chuquisaca and with its purpose, this research corresponds a type of descriptive as it seeks to solve practical problems to transform theTerms of a given process, event or phenomenon.

The sample of students was drawn from the faculties of health sciences , nursing, health technology , social sciences , humanities and sciences education, economic , accounting and financial sciences and colleges of technology, agronomy and architecture , who accepted the invitation issued by the Directorate of Research Science and Technology and the Vice President of the USFXCH.Then two groups of students from the schools were formed . Group 1 with high academic achievement and group 2 with medium high academic achievement , looking with this second group compare results and validate the data obtained with the sample of study.The first 146 students were integrated using non-probability sampling defined by internal university criteria that recognize the first two levels averages for second , third, fourth and fifth year of different undergraduate courses of each management granting the distinction to " Alfredo Arce Arce " .

**Table 1**

Studied Samples 2009 to 2012

| Áreas | Nº students |
|---|---|
| Technological Sciences | 98 |
| Health Sciences | 157 |
| Economics and Finance | 122 |
| Social Sciences | 115 |
| Total | 492 |

## Table 2

High average 2009 to 2012 for knowledge areas

| Knowledge areas | High average 2009 to 2012 |
|---|---|
| Health Sciences | 82,502 |
| Social Science | 87,977 |
| Economics and Finance | 91,148 |
| Technologicals Sciences | 76,943 |

Source: Database of USFXCH

## Inclusion and exclusion criteria
## Inclusion criteria

- Group 1: The first two students with highest efforts during 2009 to 2012.

- Group 2: Students with high academic average performance during 2009 to 2012 steps per faculty.

- Studying second to fifth year.

- Age between 19-25 years old.

- Both sexes.

## Exclusion Criteria

- Students with irregular attendance.

- Students with reinstatements.

- Students with drag subjects.

- Physical or sensory deficit that requires adjustments to instruments.

- Graduates in steps outside the temporal boundaries.

## Research Methods

Throughout the process were used the analysis, synthesis, induction, deduction and methods such as document analysis, logical and historical sistemático.The instruments used were the ASSIST questionnair of Entwistle, 1998 (25) for the analysis of approaches form of learning and research ethics and informed consent for research use.

## Questionnaire for learning approaches ASSIST

The questionnaire Approaches and Study Skills Inventory for Students (ASSIST) (25) is an instrument that evaluates the use of learning strategies of students in their work activities and the quality of learning. It consists of 66 items divided into three sections: The first 6 items to identify the concept of learning. The second contains 52 items to determine the different approaches to study, this section being that taken in this investigation.And consists of 8 items for the type of courses of the person answering the questionnaire. The answer offered 5 options of the Likert scale (OK, more or less agree, do not know, more or less disagree and disagree) are presented in three different learning strategies: deep learning; Strategic Learning and surface Learning. These have the following components:

## Analysis of results

| shallow focus | Strategies |
|---|---|
| Lack of purpose | Low importance by school subjects Do not seem relevant Searching explanation of their decisions Take courses for different reasons than the others |
| Memorize without relating | Concentration on memorization Ideas seem unrelated Not identify the important aspects Difficulty understanding |
| Law of Least Effort | Tendency to read only what is required Study just enough to pass the course Study is limited to the minimum You like the detailed explanation of the activities |
| Afraid to fail | Stress from everything you need to study Do not know if you can manage content Fear of be delayed Do not rest for thinking about it |

Initially we proceeded to determine the Cronbach's alpha to estimate the reliability of both instruments, the extent to which the instrument measured is intended to measure. The measure of reliability using Cronbach's alpha assumes that the items (measured on Likert scale) measure the same construct and are highly correlated. The reliability of the scale is 865 for deep focus., 877 for the strategic and 823 for surface data with each sample to ensure reliable measure of the construct in concrete research samples.

| Strategic focus | Strategies |
|---|---|
| Management of Time | Time management means careful organization Do homework on time studying constantly Proper use of daily time |
| Attention to task demands | feeling efficient Put more effort Determination to succeed Not difficult to motivate |
| Achievements | Impress the teacher with homework Follow teacher comments Think of the issues reviewed Focus on what he considers important |
| Monitoring the effectiveness | Impress the teacher with homework Follow teacher comments Think of the issues reviewed Focus on what I've considers important |

To perform the data processing is started making scales for determining the level of ASSIST. The scales that were obtained allowed to categorized the use of the variable of frequency of strategies and approaches to learning.

**ASSIST Scale (Sample 492)**
**Students from Universidad de San Francisco Xavier**

For statistical processing SPSS V.21 was applied through the application of non-parametric tests such as Chi square, Student t and Crosstabs for the analysis of the results the Chi square test was applied to check whether there is a relationship between the independent and dependent variables that are qualitative. The Crosstabs procedure allows for two-dimensional tables and the process of means generate a descriptive statistics to calculate the difference.

| Enfoques | Frecuencia | | | | |
|---|---|---|---|---|---|
| | Muy Baja (10%) | Baja (20%) | Moderada (40%) | Alta (20%) | Muy Alta (10%) |
| E. Profundo | 16-52 | 53-57 | 58-67 | 68-74 | 75-80 |
| E. Estratégico | 20-64 | 65-73 | 74-86 | 87-93 | 94-100 |
| E. Superficial | 16-35 | 36-41 | 42-50 | 51-58 | 59-80 |

| Deep focus | Strategies |
|---|---|
| Search for meaning | Understanding personally Discover the ideas in a written Stop and think while studying Understand the background of a problem or activity |
| Relation of ideas | Relations between different topics Mentally integrate all knowledge Read to stimulate your thoughts Reflect on own ideas |
| Use of the evidence | Consider the information Ask questions about what they hear or read Examine the details before making an interpretation Follow the thread of the arguments |
| Interest in the ideas | Thinking outside of class on academic content feeling emotion feel interest Wishes to continue studying |
| Study organization | Terms of optimal study Organization prior to exams Compliance readings suggested by his teacher Planning the weekly activities |

The t-test for two independent samples allowe the hypotheses regarding the difference between two independent means that have been studied. The qualitative analysis was based on the interpretation of data following a qualitative approach since the triangulation techniques, saturation and constant comparison.

## Analysis of results

| Sex | Value | Gl | Next asymptotic (bilateral) |
|---|---|---|---|
| Chi-square | 4,870[a] | 4 | ,301 |
| Likelihood ratio | 4,925 | 4 | ,295 |
| Asociation line by line | 3,502 | 1 | ,061 |
| Number of cases | 181 | | |
| Chi-square | 16,227[b] | 4 | ,003 |
| Likelihood ratio | 16,723 | 4 | ,002 |
| Asociation line by line | 11,529 | 1 | ,001 |
| Number of cases | 311 | | |

The value of the test for male students is 4,870. The p-value associated with this value is 0.301. Therefore a 0.05 significance level the null hypothesis of independence is not rejected and, therefore, we conclude that there is no relationship between the variable frequency, deep approach and performance.

The value of the test statistic for female students is 16,227. The p-value associated with this value is 0.003. Therefore a 0.05 significance level the null hypothesis of independence is rejected and, therefore, we conclude that there is a relationship between the variable frequency deep focus and performance.

| Contingency table No. * Performance * Deep Frequency Sex | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Strategic frequency | | | | |
| Sex | | | | Too low | Low | Moderate | high | Too high | Total |
| M | Performance | High | Count | 8 | 8 | 27 | 10 | 2 | 55 |
| | | | Expected frequency | 9,1 | 12,5 | 21,6 | 8,2 | 3,6 | 55,0 |
| | | | % Performance | 14,5% | 14,5% | 49,1% | 18,2% | 3,6% | 100,0% |
| | | | Deep Freq% | 26,7% | 19,5% | 38,0% | 37,0% | 16,7% | 30,4% |
| | | High | Count | 22 | 33 | 44 | 17 | 10 | 126 |

(continues top right)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F | | | Expected frequency | 20,9 | 28,5 | 49,4 | 18,8 | 8,4 | 126,0 |
| | | | % Performance | 17,5% | 26,2% | 34,9% | 13,5% | 7,9% | 100,0% |
| | | | Deep Freq% | 73,3% | 80,5% | 62,0% | 63,0% | 83,3% | 69,6% |
| | Total | | Count | 30 | 41 | 71 | 27 | 12 | 181 |
| | | | Expected frequency | 30,0 | 41,0 | 71,0 | 27,0 | 12,0 | 181,0 |
| | | | % Performance | 16,6% | 22,7% | 39,2% | 14,9% | 6,6% | 100,0% |
| | | | Deep Freq% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |
| F | Performance | High | Count | 4 | 7 | 40 | 29 | 11 | 91 |
| | | | Expected frequency | 5,9 | 17,3 | 39,5 | 20,8 | 7,6 | 91,0 |
| | | | % Performance | 4,4% | 7,7% | 44,0% | 31,9% | 12,1% | 100,0% |
| | | | Deep Freq% | 20,0% | 11,9% | 29,6% | 40,8% | 42,3% | 29,3% |
| | | Alto | Count | 16 | 52 | 95 | 42 | 15 | 220 |
| | | | Expected frequency | 14,1 | 41,7 | 95,5 | 50,2 | 18,4 | 220,0 |
| | | | % Performance | 7,3% | 23,6% | 43,2% | 19,1% | 6,8% | 100,0% |
| | | | % dentro Frec Estratégico | 80,0% | 88,1% | 70,4% | 59,2% | 57,7% | 70,7% |
| | Total | | Recuento | 20 | 59 | 135 | 71 | 26 | 311 |
| | | | Frecuencia esperada | 20,0 | 59,0 | 135,0 | 71,0 | 26,0 | 311,0 |
| | | | % Performance | 6,4% | 19,0% | 43,4% | 22,8% | 8,4% | 100,0% |
| | | | % dentro Frec Estratégico | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

| Contingency table No. * Performance * Deep Frequency Sex | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Deep frequency | | | | | |
| Sex | | | | Too low | low | Moderate | High | Higher | Total |
| M. | Performance | High | Count | 4 | 13 | 20 | 11 | 7 | 55 |
| | | | Expected frequency | 7,0 | 12,8 | 22,2 | 8,2 | 4,9 | 55,0 |
| | | | % Performance | 7,3% | 23,6% | 36,4% | 20,0% | 12,7% | 100,0% |
| | | | Deep Freq% | 17,4% | 31,0% | 27,4% | 40,7% | 43,8% | 30,4% |
| | | High | Count | 19 | 29 | 53 | 16 | 9 | 126 |
| | | | Expected frequency | 16,0 | 29,2 | 50,8 | 18,8 | 11,1 | 126,0 |
| | | | % Performance | 15,1% | 23,0% | 42,1% | 12,7% | 7,1% | 100,0% |
| | | | Deep Freq% | 82,6% | 69,0% | 72,6% | 59,3% | 56,3% | 69,6% |
| | Total | | Count | 23 | 42 | 73 | 27 | 16 | 181 |
| | | | Expected frequency | 23,0 | 42,0 | 73,0 | 27,0 | 16,0 | 181,0 |
| | | | % Performance | 12,7% | 23,2% | 40,3% | 14,9% | 8,8% | 100,0% |
| | | | Deep Freq% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |
| F. | Performance | High | Count | 3 | 14 | 37 | 29 | 8 | 91 |
| | | | Expected frequency | 8,8 | 18,1 | 38,9 | 18,1 | 7,0 | 91,0 |
| | | | % Performance | 3,3% | 15,4% | 40,7% | 31,9% | 8,8% | 100,0% |
| | | | Deep Freq% | 10,0% | 22,6% | 27,8% | 46,8% | 33,3% | 29,3% |
| | | Medium | Count | 27 | 48 | 96 | 33 | 16 | 220 |
| | | | Expected frequency | 21,2 | 43,9 | 94,1 | 43,9 | 17,0 | 220,0 |
| | | | % Performance | 12,3% | 21,8% | 43,6% | 15,0% | 7,3% | 100,0% |
| | | | Deep Freq% | 90,0% | 77,4% | 72,2% | 53,2% | 66,7% | 70,7% |
| | Total | | Count | 30 | 62 | 133 | 62 | 24 | 311 |
| | | | Expected frequency | 30,0 | 62,0 | 133,0 | 62,0 | 24,0 | 311,0 |
| | | | % Performance | 9,6% | 19,9% | 42,8% | 19,9% | 7,7% | 100,0% |
| | | | Deep Freq% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

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The value of the test for male students is 6,081. The p-value associated with this value is 0.193. Therefore a 0.05 significance level the null hypothesis of independence is not rejected and, therefore, we conclude that there is no relationship between the variable rate strategic approach and performance.

The value of the test for female students is 16,205. The p-value associated with this value is 0.003. Therefore a 0.05 significance level the null hypothesis of independence is rejected and, therefore, we conclude that there is a relationship between the variable rate strategic approach and performance.

| **Table No. chi-squared tests** | | | | |
|---|---|---|---|---|
| Performance | | Value | gl | next (bilateral) |
| High performance | Chi-square | 11,215[a] | 4 | ,024 |
| | Number of cases | 146 | | |
| Lower performance | Chi-square | 10,756[b] | 4 | ,029 |
| | Number of cases | 346 | | |

a. 2 cells (20.0%) have an expected frequency less than 5. Minimum expected frequency is 4.52.

b. 0 cells (, 0%) have an expected frequency less than 5. Minimum expected frequency is 9.10.

The value of the test for high-achieving students is 11,215. The p-value associated with this value is 0.024. A significance level of 0.05 the null hypothesis of independence is rejected; therefore is concluded that there is a relationship between the variable and strategic approach. The statistic value in the average income is $ 10,756 higher. The p-value associated with this value is 0.029. Therefore a 0.05 significance level the null hypothesis of independence is rejected and, therefore, we conclude that there is a relationship between the variable strategic focus and sex

## Discussion

Studies on deep approach developed in different contexts Beltrán y Barriga [72] Valle Arias País [40] Alfonso [69] and. Barca, Peralbo. [42] Barca; [69] De la Fuente 2008 talk about their significant relationship with high performance; is possible to say that the results founded in the group of San Francisco have some differences with Salim studies [77] when he says that the deep approach does not necessarily generate a good academic results and in this group we see the intense Relationships with the high performance group.

**Contingency table No. * Performance * Deep Frequency Sex**

| Performance | Sex | | Too low | low | Moderate | high | Too high | Total |
|---|---|---|---|---|---|---|---|---|
| | | | | | Strategic frequency | | | |
| High | Masc | Count | 8 | 8 | 27 | 10 | 2 | 55 |
| | | Expected frequency | 4,5 | 5,7 | 25,2 | 14,7 | 4,9 | 55,0 |
| | | % Inside de sex | 14,5% | 14,5% | 49,1% | 18,2% | 3,6% | 100,0% |
| | | % inside Strategic Fre | 66,7% | 53,3% | 40,3% | 25,6% | 15,4% | 37,7% |
| | Fem | Count | 4 | 7 | 40 | 29 | 11 | 91 |
| | | Expected frequency | 7,5 | 9,3 | 41,8 | 24,3 | 8,1 | 91,0 |
| | | % Inside de sex | 4,4% | 7,7% | 44,0% | 31,9% | 12,1% | 100,0% |
| | | % inside Strategic Fre | 33,3% | 46,7% | 59,7% | 74,4% | 84,6% | 62,3% |
| | Total | Count | 12 | 15 | 67 | 39 | 13 | 146 |
| | | Expected frequency | 12,0 | 15,0 | 67,0 | 39,0 | 13,0 | 146,0 |
| | | % Inside de sex | 8,2% | 10,3% | 45,9% | 26,7% | 8,9% | 100,0% |
| | | % inside Strategic Fre | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |
| Lower | Masc | Count | 22 | 33 | 44 | 17 | 10 | 126 |
| | | Expected frequency | 13,8 | 31,0 | 50,6 | 21,5 | 9,1 | 126,0 |
| | | % Inside de sex | 17,5% | 26,2% | 34,9% | 13,5% | 7,9% | 100,0% |
| | | % inside Strategic Fre | 57,9% | 38,8% | 31,7% | 28,8% | 40,0% | 36,4% |
| | Fem | Count | 16 | 52 | 95 | 42 | 15 | 220 |
| | | Expected frequency | 24,2 | 54,0 | 88,4 | 37,5 | 15,9 | 220,0 |
| | | % Inside de sex | 7,3% | 23,6% | 43,2% | 19,1% | 6,8% | 100,0% |
| | | % inside Strategic Fre | 42,1% | 61,2% | 68,3% | 71,2% | 60,0% | 63,6% |
| | Total | Count | 38 | 85 | 139 | 59 | 25 | 346 |
| | | Expected frequency | 38,0 | 85,0 | 139,0 | 59,0 | 25,0 | 346,0 |
| | | % Inside de sex | 11,0% | 24,6% | 40,2% | 17,1% | 7,2% | 100,0% |
| | | % inside Strategic Fre | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

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The results founded in the female group show that the San Francisco deep approach if associated with high academic achievement.

Regarding the strategic focus in high performance in the female group do not have a significant differences with the male group in organization of the study, time management, achievements and effectiveness, monitoring results were also reported by A. Valle, Ramon G. Cabanach, Goals [76] and also highlights that there is a relationship between performance and the strategic planning. Preferably in females is observed by the strategic approach, results in another discoveries Ramirez (138) study; but differ from those obtained by Salas [66] who say men preferably applied a strategic approach.

To Broc [56] and Cabanach [54] highlight high metacognitive self-regulation and achievement goals in the case of high yield figure. AriasPaís Valle [40] H. Salmeron [44], emphasizes time management and achievement goals and self-regulation strategies.

To Broc [56 the difference between performance groups (high, medium and low) are time management, effort regulation and metacognitive self-regulation, which are the components in which differences were found between high and upper middle in this research in the USFXCH.

To several authors Salas [66] Broc [56] Abalde [73] Gargallo approaches [70] Carvallo Soto (80) high performance students apply both a deep strategic approach.

To Valle [71] the relationship of deep focus and achievement occurs in both high academic performance as average high and Barca [69] the average yield and high and deep reasons adopts and achievement strategies, but we see that in the group are higher because there are strong differences in the study group of USFXCH

Students with highest average also applied a superficial focus since there are significant differences in lack of purpose, unrelated memorizing and fear of failure. To Gonzalez R, Valle A, Suarez JM, Fernández [54], Valle Arias País [40] shallow focus is related the motivational components of extrinsic character that is the fear of the consequence and not much interest in the study itself same.

To Soto Carvallo [80] this superficial approach is not related to the planning and Waiters. [27] Perez [75] this approach is deficient in regulation, Broc showing the findings [56] when he is referred to the differences between the highest performance with the medium.

Although De la Fuente (74) emphasizes that there is a relationship between the DEEP approach, the average yield and high refering that both approaches could be found in the preferred application of this approach however upper mids are more superficial than students of high groups.

Important to note that despite being groups of high-achieving students and high average, these strategies make use of shallow focus Broc [56] for whom there is no use of strategies the case of shallow focus, perhaps concerned that the purpose of using a certain type of strategy is different, as the case of memorizing unrelated to achieve a grade without compredener, and if the goal is to get high scores, strategy must be applied, which is the case of students whose goal is more greater to the success and achievements, not so much of a student with greater preference for deep focus. Therefore, it is possible to say that the surface approach and deep are exclusive following González R, Valle A, Suarez JM, Fernández [54].

## Conclusions

There are significant differences in the group with a preference for female strategic approach with a higher average in the organization of the study components, attention to the demands of the tasks, achievements and effectiveness monitoring where women obtained higher averages.

The female students of high performance group obtained higher means in the deep and strategic approaches, in the second there are significant differences in organization of the study; time management, monitoring achievements and effectiveness in all components of female students in high yield averages in metacognitive self-regulation, management of time and regulation in the important case of strategic learning.

In shallow focus, males scored higher than female values, especially when there is a lack of purpose and memorization; more preferably invites us to reflect on why a student who has a high preference for the deep approach also has a preference for the surface approach, which shows the need to analyze what aspects should be reviewed so that the student go to the high performance memory and does not have a clear purpose in the process of learning.

Many elements of reflection arise before the results of this study certainly known as the mental processes that apply gender, students are different and it is important to analyze the importance of facilitating knowledge considering the diversity of approaches that have these violent groups of the San Francisco Xavier.

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