UNIVERSITY STUDENTS' OPINION ON THEIR INSTRUCTIONAL MOTIVATION*

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Abstract

Instructional motivation is relevant for student academic success and the improvement of teaching strategies. Many factors contribute to the growth of student's motivation to learn. The scientific literature investigated this issue and its different dimensions related to specific components of the educational process at the university level. This study investigates the opinion of university students on their level of instructional motivation, after a semester of using the ARCS model in the teaching process. The students' responses showed a percentage over 50% for instructional motivation with high frequencies of manifestation in the specific dimension of ARCS model. Knowing the opinion of the students about their instructional motivation, teachers could use it in the teaching process and improve their teaching strategies. Also, by adapting the teaching model to students' instructional motivation, the results could be an educational context supporting students who are not so well motivated for the instructional learning process.

Key words: Students motivation; Instructional motivation; ARCS model.

1. Introduction

In many educational contexts, understanding how learning affects students' behavior is intimately related to understanding what motivates them. This statement draws attention to the awareness of the learner's personal level of motivational involvement in the task. But the lack of motivation for learning can be a difficulty faced more and more frequently, a barrier to the success of the educational process and sustainable learning. It is very important that students engage their motivation in the university learning process. Evaluating their motivational level refers to identifying the level of attention, interest, curiosity, and persistence in tasks through periodic observations, monitoring, and optimization if necessary. Many educational

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contexts use different modalities to develop these specific dimensions of student motivation. Students must reflect on their motivation to learn to improve specific nonfunctional aspects.

Without motivation, the learning task is difficult to complete. Motivation is a relevant contributor to student success and retention in higher education, and one needs to pay more attention to it.

2. Theoretical background

Many researchers investigated the role of motivation in sustaining the quality of the teaching or learning processes in the university. Students' motivation sustained their progress and performance in the university learning process. Different elements of students' instructional motivation sustain their academic performance, as evidence of their learning process efficiency. Dohnal (2016) emphasized the important role of motivation in teaching and learning, and a decrease in students' motivation to achieve excellent results. Afzal, Khan & Hamid (2010) mentioned that students' motivation (extrinsic or intrinsic) sustains their academic success and performance. Stoeber *et al*. (2011) pointed out that it is a strong relationship between harmonious and obsessive passion for study, academic engagement, and academic burnout. Drugaş (2008) investigated the role of self-determination of the students in the university environment. Hasan (2010) discussed the influence of students' motivation on their academic performance, in different universities in Pakistan. The study indicates that student motivation positively impacts students' academic performance. Crumpton & Gregory (2011) studied the effects of academic relevance on task engagement and achievement. Buzdar *et al*. (2017) mentioned a significant correlation between intrinsic and extrinsic motivation and students' academic performance. Muhammad *et al*. (2015) demonstrated a strong relationship between students' motivation and academic performance, promoting the necessity to increase it. Na, Petsangsri & Tasir (2020); Amrai *et al*. (2011); Eymur & Geban (2011) stressed the positive relationship between motivation and students' academic achievement. However, Bakar *et al*. (2010) showed that students' academic achievement is not determined only by their motivation.

On the other hand, students' high motivation for learning determines a qualitative teaching process. So, teachers must provide an educational context that sustains students' instructional motivation. In this respect, some authors developed different models for academic motivation and studied their impact on the learning process. Keller (1987a; 1987b; Keller & Keller, 1989) developed the ARCS Model (Attention, Relevance, Confidence, and Satisfaction), using specific strategies that produce improvement in students' instructional motivation. Izmirli & Izmirli (2015) investigated students' motivation in the online educational process using items correlated with the ARCS model. Alhazbi (2015) showed the effect of using the ARCS motivational model in computer programming courses on students' learning performance. Li & Keller (2018) mentioned the different contexts in which was used the ARCS model and evidence (from design and appliance) on the impact of it on students learning or some personal characteristics. Ucar & Kumtepe (2020) studied

how ARCS model strategies impacted the motivation, interest in the course, volition, and performance levels of distance learning students. Ma & Lee (2021) investigated the ARCS model's effectiveness, comparing blended learning with face-to-face and pure online learning. Other models were developed in different fields to prove the importance of academic motivation for learning. Jones (2009) developed the MUSIC model of academic motivation to provide teachers with a guide to helping them make decisions about course design for increased learner engagement. Also, Efklides (2011), using the MASRL model revealed the relationship between metacognition, motivation, and self-regulated learning.

Knowing students' opinions on what is the mobile that supports their motivation to learn is very important to sustain the growth of their performance in the educational process. Some authors developed instruments to measure their motivation to learn and continue their studies. For example, The Academic Motivational Scale pointed out that intrinsic, extrinsic, and amotivation are dimensions of students' motivation (Vallerand *et al.*, 1992). Keaveney & Young (1997) used The student satisfaction and retention model for established students' level of satisfaction and retention in higher education. The Student Opinion Scale (Sundre & Moore, 2002; Thelk *et al.*, 2009) estimated the test-taker motivation of the students. Smirnova *et al.* (2020) identified, using questionnaires the main motives which sustain junior and senior students to continue the next level of their education.

3. Research methodology

The research objective was to identify the opinion of students on their instructional motivation, after using the ARCS model in teaching. The study is descriptive quantitative research.

The participants were 117 second-year students in Pedagogy II discipline, 2022-2023 year of study, first semester, at Teacher Training Department from The West University from Timisoara, Romania. 83 respondents were female and 34 were male. 114 respondents were between 19-25 years old and 3 respondents were between 26-47 years old.

The questionnaire has 31 items (see Appendix 1) based on Keller's (1987a; 1987b; Keller & Keller, 1989) ARCS Model. On each axis are formulated items that indicate students' motivation indicators correlated with specific strategies suggested by this model.

The teaching and assessment techniques were used according to the ARCS motivation model of Keller, during a semester. The Attention Axis - the student's reporting to the content and the activity carried out within the training process- was maintained and improved by using methods that sustain the students' curiosity, interest, and enthusiasm. The Relevance axis-the relationship that the learner established between the contents used in teaching and their relevance for the activity they carry out, both within the course and in another context- was ensured by the correspondence of the operational-pragmatic objectives with the training needs and the students' level of knowledge. The Trust Axis - the expectations of the students

regarding the course, in general, and the teaching in particular, and is the next determining aspect of improving the motivation for the course- was achieved by ensuring an environment based on facilitative learning and permanent feedback provided by the trainer on the personal progress of the students. The Satisfaction axis - the satisfaction of the students' achievement of the initial expectations (the goals set at the beginning of the course)- was achieved by providing feedback (from the teacher or colleagues) with the role of clarifying the level reached by the students, but also optimizing their learning activity.

The questionnaire was completed online on Google Forms, using the following scale from 1 to 5 (1-never; 2-for a few times; 3-sometimes; 4-for many times; 5-always). The method of scoring used was the arithmetic average of the answers.

4. Results
The means on each item and each axis were presented in the following table:

Table 1. Students' opinion on their instructional motivation

Items	1-Never	2-for a few times	3-sometimes	4-for many times	5-always
Attention Axis					
I1.	0,9%	2,6%	35,9%	55%	7,7%
I2.		4,9%	13,7%	70,9%	11,1%
I3.			19,7%	50,4%	29,9%
I4.	0,9%	1,7%	15,45	48,7%	33,3%
I5.		3,4%	26,5%	43,6%	26,5%
I6.		5,1%	17,9%	47,9%	29,1%
I7.	4,3%	12,8%	37,6%	34,2%	11,1%
Relevance Axis					
I8.		2,6%	12,8%	42,7%	41,9%
I9.		0,9%	14,5%	39,3%	45,3%
I10.		6,8%	41%	43,6%	8,5%
I11.		3,4%	9,4%	41%	46,2%
I12.		1,7%	27,4%	48,7%	14,5%
I13.	1,7%	13,7%	44%	36,8%	3,4%
I14.	12%	19,7%	27,4%	23,1%	17,9%
I15.	0,9%	0,9%	7,7%	44,4%	46,2%
I16.		2,6%	20,5%	43,6%	33,3%
Trust Axis					
I17.	1,7%	12,8%	35,9%	32,5%	17,1%
I18.	0,9%	3,4%	17,9%	44,4%	33,3%
I19.	3,4%	21,4%	37,6%	21,4%	16,2%
I20.	2,6%	5,1%	23,1%	42,7%	26,5%
I21.	2,6%	5,1%	22,2%	35,9%	34,2%
I22.		3,4%	17,9%	51,3%	27,4%
I23.	3,4%	12,8%	20,5%	35,9%	27,4%

I24.	0,9%	3,4%	14,5%	43,6%	37,6%
Satisfaction Axis					
I25.	1,7%	17,9%	32,5%	29,1%	18,8%
I26.	1,7%	9,4%	23,1%	44,4%	21,4%
I27.	17,1%	19,7%	29,9%	22,2%	11,1%
I28.		2,6%	13,7%	61,5%	22,2%
I29.		3,4%	17,1%	55,6%	23,9%
I30.		2,6%	11,1%	35%	51,3%
I31.		24,8%	6%		69,2%

On the Attention axis (the positive responses), the highest mean was obtained by I2 "I focus on the content I am learning" 70,9% (many times), and I1 "I get excited when I study new content" 55% (many times). Regarding the negative responses, the highest mean was obtained by I7 "I enjoy learning challenging content"- 12,8% (a few times) and 4,3% (never).

On the Relevance Axis (the positive responses), the highest mean was obtained by I12 "I clearly establish my level of knowledge in the field"- 48,7% (many times), I11 "I enjoy learning content that meets my personal needs" and I15 "I study to achieve my proposed goals"- 46,2% (always), I9 "I like to put into practice what I have learned" - 45,3% (always). Regarding the negative responses, the highest mean was obtained by I14 "I like to learn together with other people" – 19,7% never and 12% (a few times) and I13 "I choose the knowledge that is slightly above my level of knowledge"- 13,7% (a few times).

On Trust Axis (the positive responses), the highest mean was obtained by I22 "I take into account the opinions of my colleagues and the teacher when I solve a learning task"- 51,3% (many times) and 27,4% (always), I18 "I am a person inclined toward achieving success"- 44,4% (many times) and 33,3% (always), and I24 "I am convinced that every colleague in the workgroup is capable of succeeding in learning"- 43,6% (many times) and 37,6 % (always). Regarding the negative responses, the highest mean was obtained by I19 "I am aware that whether I succeed or not does not always depend only on me"- 21,4 % (few times).

On Satisfaction Axis (the positive responses), the highest mean was obtained by I28 "I take into account the teacher's assessment and continue to apply his advice"- 61,5% (many times) and 22,2% (always) and I29 "I compare my results with the goals I set for myself" – 55,65 (many times) and 23,9% (always). Also, I31 "I feel satisfaction when I achieve my goals in the learning activity" obtained the highest level on means – 69,2% (always) and 24,8 % on negative answers (few times).

5. Discussions

What is the possible relation of these responses with the application of the ARCS model? The constructed items were correlated with the specific situations and contexts created through the ARCS model, during a semester. Students were prepared to use at a high level their instructional motivation through the assessment tasks (oral group presentation, individual design for a lesson, and final assessment – different

types of subject). In this respect, we observed that a large part of items obtained an average of over 50% of responses summing the "many times" and "always" levels that confirm the high level of instructional motivation (in their opinion).

In the case of I7 "I enjoy learning challenging content" the sum of the averages of the positive responses was under 50% means students enjoy learning new content, but not automatically challenging ones (37,6%-sometimes). One solution presented in the literature was to grow student exposure to different types of content (Ditta *et al.*, 2020).

Also, in the case of I13 "I choose the knowledge that is slightly above my level of knowledge" the average was under 50% summing the "many times" and "always" means of the responses. However, students said (44%) sometimes like to learn content above their level of knowledge. A high level of responses on I.11 revealed that students enjoy learning content that meets their personal needs (41% many times and 42,6% always). To activate this factor, teachers could prepare academic content knowledge that contributes to students' learning and achievement (Gess-Newsome, 2019).

Studies demonstrate that cooperative learning determines a high level of student motivation to learn (Tran, 2019), so this factor could be an important one in motivating students for learning. Even our respondents are not considered so relevant for their motivation to learn: I14 "I like to learn together with other people" obtained under 50% on the positive levels of the scale, the students declare that feel satisfaction if we succeed as a team up to 50% (I.30). Students' responses revealed that sometimes (29,9%- the highest score for this item) are not comparing their results with those of colleagues.

So, for many respondents (see the negative scale percentages), it is not the most relevant factor that offers satisfaction in the learning process. The results obtained on the Satisfaction axis show that teachers' assessment and feedback are very motivating factors for assuring students' motivation to learn (Johnson, 2017) and students' responses sustain this affirmation.

Also, by approaching a learning goal orientation in their learning processes, students/s obtain a higher performance (Lunenburg, 2011). Students mentioned that attending to their goals in the learning process gives satisfaction and sustains their motivation and performance (69,2%-always).

6. Conclusions

This research does not compare the results between axis. This is one of the limitations of the study. Another one is not comparing students' answers at the beginning of the educational process and at the end. Could be future research to identify the impact of the ARCS model application on each motivational dimension developed through this motivational model. Also, it could be identified in the future correlations between students' motivation on each axis and students' performance.

This research does not have a goal to classify the characteristics of the student's instructional motivation after using the ARCS model in teaching. The results showed only students' opinions about their instructional motivation, after the

teacher used ARCS instructional model and highlighted the importance of specific factors in motivating them to learn, such as content that meets their personal needs, attending to their personal learning goals, cooperative learning, and teachers' feedback on their learning. The fact that students are aware only sometimes (37,6%) of the multitude of factors that influence academic success indicates that teachers must support them in each educational context to realize that achievement of learning objectives is the result of several factors.

Each proposed dimension of the questionnaire could be considered an important factor to promote the development of some specific instruments for applying the ARCS model in the educational process. Observing what are characteristic of the student's instructional motivation, teachers could use it in the teaching process and improve their teaching strategies. Also, by adapting the teaching model to students' instructional motivation, the results could be an educational context supporting those who are not so well motivated for the instructional learning process.

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APPENDIX: Questionnaire on the opinion of university students about their instructional motivation.
Please, offer your support in answering questions referring to how are you motivated to learn after this semester. Completing the questionnaire takes approximately 10 minutes. The 31 items have 5 possible answers, using a scale from 1 to 5 (1-never; 2-for a few times; 3-sometimes; 4-for many times; 5-always). It is assured the confidentiality of the data provided.

Attention axis
1. I get excited when I study new content
2. I focus on the content I am learning
3. I find it interesting to acquire new contents
4. I relate the new content to what I already know
5. I am curious to learn as much new information as possible
6. What is interesting and surprising about new content attracts me
7. I enjoy learning challenging content

Relevance axis
8. I enjoy learning content that will be useful to me
9. I like to put into practice what I have learned
10. I am actively involved in learning
11. I enjoy learning content that meets my personal needs
12. I clearly establish my level of knowledge in the field
13. I choose the knowledge that is slightly above my level of knowledge
14. I like to learn together with other people
15. I study to achieve my proposed goals
16. I want to benefit from the assimilated knowledge even after the course

Trust Axis

17. When I get involved in an activity, I am confident in my own strength
18. I am a person inclined toward achieving success
19. I am aware that whether I succeed or not does not always depend only on me
20. I am relaxed in my relationship with colleagues in the workgroup
21. I am convinced that if I study, I will succeed
22. I take into account the opinions of my colleagues and the teacher when I solve a learning task
23. I do not change my principles to obtain benefits within the course
24. I am convinced that every colleague in the workgroup is capable of succeeding in learning

Satisfaction axis

25. I learn only what gives me satisfaction
26. I set myself high standards when I study
27. I like to compare my results with those of my colleagues
28. I take into account the teacher's assessment and continue to apply his advice
29. I compare my results with the goals I set for myself
30. I feel satisfaction if we succeed as a team
31. I feel satisfaction when I achieve my goals in the learning activity

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