Evaluation of university community mobilisation strategies for Covid-19 vaccination in Côte d'Ivoire

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Abstract

The COVID-19 pandemic, declared by the World Health Organization (WHO) as an international public health emergency (USPI) on January 30, 2020, has created a serious global health crisis. In addition to the adoption of measures requested by the authorities, the option of vaccination of populations remains the most viable solution. As a result, more than 30 candidate vaccines were evaluated in advanced clinical trials with safety and efficacy data up to 95%. In Côte d'Ivoire, vaccination, which began in March 2021 thanks to the COVAX mechanism, is struggling to spread beyond the relatively satisfactory figures. Faced with this situation, the Ivorian government has adopted several strategies of mobilizations, starting from local awareness campaigns to mass vaccination campaigns of agents most exposed because of their professions, persons with co-morbidities and persons aged 60 and over. In this same logic of local campaigns, the State of Côte benefited from USAID funding through AFROHUN-Project ARPA-Covid-19. In this same logic of local campaigns, the State of Côte benefited from USAID funding through AFROHUN-Project ARPA-Covid-19. In the implementation of this project, several engagement strategies were adopted. These are the involvement of university authorities, Research Teachers and Researchers, Administrative and Technical Staff (PAT) as well as Students. This article is a critical analysis of these strategies. It is intended to review and analyze satisfaction levels for each area of engagement of the university community. The participants in the study are the actors in the project coordination team. Using a five-point Likert scale, they were asked about their level of satisfaction with the engagement strategies adopted in the project. The results show different levels of stakeholder satisfaction with the involvement of the project targets. After analyzing these results, proposals are made to increase the level of acceptability of vaccination in universities. The theoretical basis for this study is Zimmerman's self-regulation model [1].

Introduction

The Corona Virus (COVID-19) disease, declared by the World Health Organization (WHO) as an international public health emergency (USPI) on January 30, 2020, does not spare any continent. Like the countries of the western continents and Africa, Côte d'Ivoire is being shaken by this pandemic. The WHO even points out that this is a serious global health crisis. Countries have adopted several health measures to address this situation. For example, in Côte d'Ivoire, populations were asked to adopt and comply with preventive health measures such as observing a distance of one meter between people, greeting without shaking hands and without kissing, regular hand washing (for at least 40 seconds), coughing or sneezing in the elbow, compliance with government containment measures, non-consumption of bush meat, wearing a nose mask, use of gels and hydro alcoholic solutions, etc. (cf. www.gouv.ci/ Official portal of the Government of Côte d'Ivoire) [2]. These measures were accompanied by awareness campaigns through public and private audio-visual media. And on April 24, 2020, the Minister of Youth Promotion and Employment announced the engagement of 700 young people to help in the awareness campaign for a duration of 3 months (cf. www.gouv. ci).

In addition, benefiting from the Covax device, aimed at disadvantaged countries, Côte d'Ivoire receives, on Friday, February 26, 2021, 504,000 doses of vaccine against COVID-19. Côte d'Ivoire also receives, on Friday 5 March, 50,000 doses of the Covishield vaccine, offered by the Republic of India at Abidjan airport.

Through the public and private audio-visual media, populations are regularly informed of the free administration of vaccine doses and vaccination sites. But it is clear that these populations do not rush for vaccines. As a result, the Ivorian government has launched mass awareness and vaccination campaigns. Thus, on 9 September 2021, the National Security Council (CNS), meeting in Abidjan under the leadership of President Alassane Ouattatra, announced the launch of a large-scale awareness campaign for vaccination in the greater Abidjan region before 15 October 2021, at least for the first dose, from categories of people deemed to be more exposed. On the 16th of the same month and year, the Minister in charge of Health conducted, in collaboration with the City of Cocody, a proximity campaign in this municipality to encourage people to get vaccinated against Covid-19.

Of these different strategies, Côte d'Ivoire has set a target of 70% of the population to be vaccinated.

In addition, Côte d'Ivoire has benefited from USAID funding through AFROHUN-Côte d'Ivoire, which is headquartered at UFHB. This is AFROHUN-ARPA-Covid-19 Project. The objective of the project is to mobilize the academic community to accept COVID-19 vaccination. The project, which began in October 2021, was implemented through three categories of targets:

- University authorities;

- Teachers of higher education and the Administrative and Technical Staff (PAT);

- Students

The ARPA project should contribute to achieving the national coverage rate target set by the Ivorian government. At present, vaccination coverage rates are 63% for the most exposed people and 43% for the overall population (Ministry of Health, 2022). In such circumstances, most of the reflections are on whether or not the objective has been achieved. Rarely, the strategies put in place to achieve the goal are questioned. However, the work of psychology of learning shows that for a learning to be effective, that is to say, it achieves its objective, it must be inscribed in a cyclical model [3]. Effective learning implies that actions are taken, that questions are asked about the level of achievement of the learning objective, but above all that the actions carried out in the context of learning are analysed. This is the cyclical pattern of self-regulated learning [1,4]. In this sense, Cosnefroy, et al. [5] argues that the relationship between initial motivation to learn and learning self-regulation is a dialectical relationship where both are in turn causes and consequences. This work is part of the cyclical model of self-regulation. It intends to critically analyse the mobilization strategies adopted in this project.

Materials and methods

The analysis of the project is based on the mobilization component of the university community at Félix Houphouët Boigny University. The following paragraphs present the study participants and the materials used.

Participants

There are two categories of participants. The first category is the coordination team and the actors responsible for mobilizing within the framework of the project. These include the coordinator, the thematic leads in charge of mobilization, two activity leads in charge of mobilization and the communication consultant for awareness raising, or 5 participants for the first category. The second category includes the project's target groups, namely Higher Education Teachers (Teacher-Researchers and Researchers) and Administrative and Technical Staff (PAT). For this category, we interviewed the Teachers of the Superior and the PAT who agreed (following the reading of the verbal consent) to submit to our questionnaire. Thus, for this second category, 30 participants, 20 Teachers of the Superior and 15 PAT, were interviewed.

Materials

Study participants were submitted to two measurement instruments, a five-point Likert psychometric scale and a questionnaire. The Likert psychometric scale was used to assess stakeholder perceptions of levels of engagement in project targets. The aim was to obtain information on the level of satisfaction of project actors in relation to the level of involvement of the project targets following the implementation of the mobilization strategies.

The questionnaire was used to assess the impact of mobilization strategies used in the project on the targets. Impact was assessed along the following axes:

- Participation in the AFROHUN mobilization and awareness campaign;

- Assessment of the strategy adopted in the project;

- Campaign position in the vaccination agreement;

- The reasons for their agreement to be vaccinated;

- Proposals for improving future campaigns.

Questions are closed for all axes except the last. Administration is individual and takes about 3-5 minutes.

Data collection

The data collected focused on the perceptions of project implementation actors and on the impact of the project on the targets. As regards the perceptions of the actors, it is a question of knowing their level of satisfaction with the involvement of the different targets. Implementation actors were asked to rate their satisfaction with the involvement of the various targets on a scale of 1-5 points (1=Not satisfied; 5=Absolutely satisfied). These assigned ratings were supported by supporting arguments. In short, participants assessed the involvement of each target category in the engagement strategy and provided reasons for their rating.

The questionnaire was administered under the following conditions. The interviewer hands the questionnaire to the respondent after reading the consent text. Once consent is obtained, the respondent fills in the questionnaire and then returns the questionnaire form to the interviewer. These data were collected from the beneficiaries who are the primary targets of the campaign, comprising teaching staff and administrative and technical personnel (PAT) through a questionnaire. The information collected focused on their level of appreciation of the campaign and on the reasons for their decision to be vaccinated or not.

Data processing

The data collected, expressed in frequencies, were grouped in tables corresponding to the levels of satisfaction with the involvement of the three target categories and the impact of the project on the targets. These tables have been integrated into the Excel software to build graphical representations of data.

Results and discussion

Perception of the level of involvement of targets by project stakeholders

The results relate to the assessment of the involvement of different categories of actors.

Level of satisfaction with the involvement of university authorities.

On the basis of Figure 1, the level of satisfaction of project actors with regard to the involvement of university authorities is mostly 3. This means that respondents consider the involvement of university authorities as average.
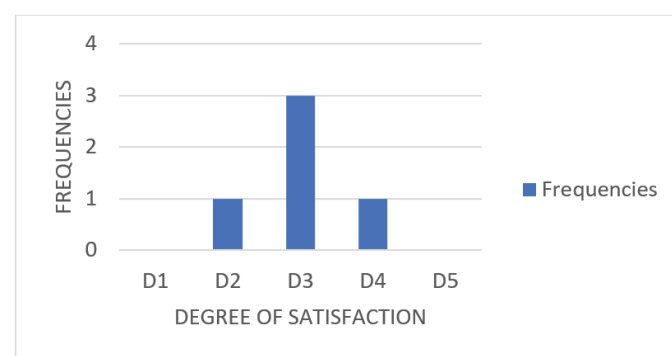

Figure 1. Degree of satisfaction with the involvement of university authorities

Level of satisfaction with the involvement of teachers

Figure 2 shows the degree of satisfaction of respondents with the involvement of Teaching- researchers and Researchers as well as administrative and technical staff (PAT) at the University of Félix Houphouët Boigny. It appears that the majority of respondents rate 2/5 as satisfied with the involvement of this target category. The level of involvement of this category is considered fable by the project actors.

Level of satisfaction with student involvemen*t*

Figure 3 shows that the majority of project participants estimate 4/5 students' level of involvement. They consider the involvement of students in the implementation of the ARPA- Covid-19 Project to be satisfactory.

The project actors, perceiving the levels of involvement of teachers and low PATs, to deepen our understanding of this state of affairs, it seemed important to us to pay special attention to these targets, these are key links in the processes of changing behavior at universities.

Impact of the project on targets (Higher Education Teachers and PAT)

The results at this level relate to comparisons of response frequencies between the targets (Teachers of the Superior and PAT) for each axis of the questionnaire.

Participation in the engagement and awareness campaign

Of the 15 PATs interviewed, 2/5 said they participated in the campaign, while 3/5 said they did not. Similarly, of the 20 Teachers of
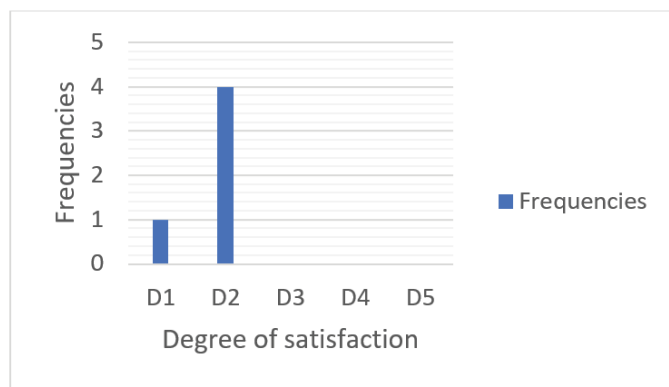
Figure 2. Degree of satisfaction with the involvement of teachers and PAT
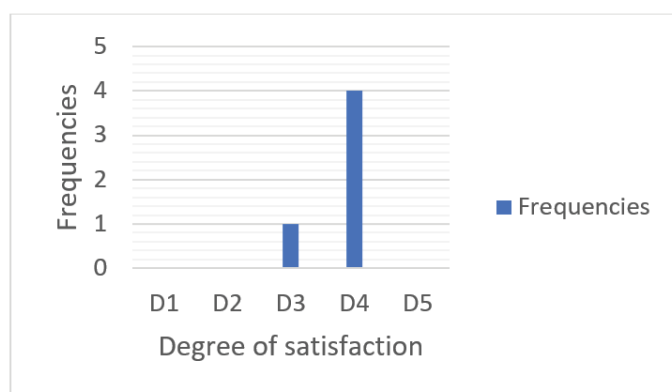
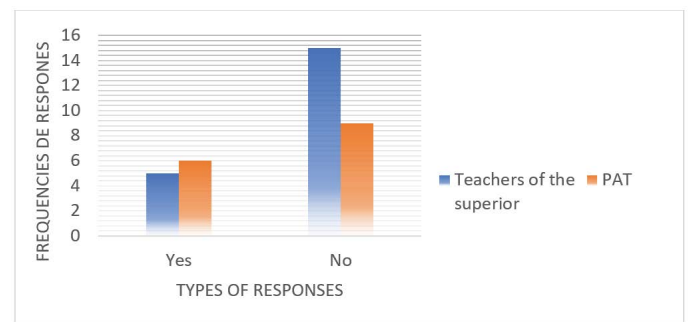**Figure 3.** Degree of satisfaction with the involvement of students

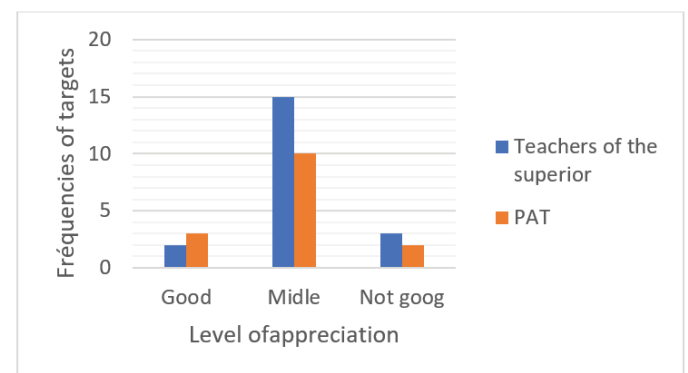**Figure 4.** Participation frequencies of Teachers of the Superior and of the PAT

Figure 5. Level of appreciation of the campaign by project targets

the Superior surveyed, 1⁄4 say they participated in the campaign, while 3⁄4 did not participate (Figure 4).

Evaluation of the campaign strategy

The Teachers of the Superior appreciate differently the strategy adopted. 10% consider it good, 75% consider it average and 15% think it is not good. As for the PAT, 20% consider the strategy to be of a good level, 66.67% qualify it as an average level, while 13.13% believe that it is not of a good level (Figure 5).

Contribution of the campaign to the decision on vaccination

The Teachers of the Superior surveyed are 35% of those vaccinated at the end of the campaign and 65% outside the campaign. The PAT is 66.67% at the end of the campaign and 33.33% outside the campaign (Figure 6).

Motivation for vaccination at the end of the campaign

Among the Teachers of the Superior who were vaccinated at the end of the campaign, 28.57% said that scientific justifications were the most important factors in their decision-making, while 71.42% mentioned good testimonies from the vaccinated personalities. For vaccinated PAT, 20% say they were motivated by scientific justifications, while 80% attribute their decision making to the good testimonies of the vaccinated personalities (Figure 7).

Motivation to not vaccinate at the end of the campaign

Among the Higher Education Teachers, the reasons for not being vaccinated are, in descending order of importance, the mistrust towards the vaccine (53.84%), the bad idea preconceived about vaccination (23.07%) and the lack of efficacy of the vaccine (23.07%). On the other hand, two reasons are mentioned for PAT, namely mistrust of

the vaccine (60%) and the wrong preconceived idea about vaccination (40%) (Figure 8).

Proposals for future campaigns

When the proposals for targets are analyzed, there are constant elements. While the Teachers of the Superior propose the designation of focal points in the Departments and Research Centres, the PAT propose focal points in the Human Resources Directorates (DRH) and administrative services.

Discussion

This study is part of an ex-post evaluation approach. This approach is often seen as a weak link in the analysis of transport infrastructure and public initiatives. As a rule, it is based on an ex- ante study that in our case consists of the awareness campaign for the vaccination against COVID-19 to staff at the University Félix Houphouët Boigny de Cocody. The purpose of this study was to predict project effectiveness rather than to exploit results from past decisions [6]. The objective of the study is to assess the perception of the level of involvement of the ARPA-Covid-19 project targets among stakeholders involved in the implementation of the project. The evaluation of this perception focuses on the community targets at Félix Houphouët Boigny University. It also collected the motivations of the targets to join or not to join the campaigns initiated. In this sense, the study is situated in the perspective of socio-cognitive theories. Thus, it calls for the theoretical frameworks mobilized to address the links between reasons of engagement, objectives, motivation, commitment, self-regulation and learning strategies [7,8].

The results of this evaluation show that project actors perceive different levels of involvement in the three target categories. University
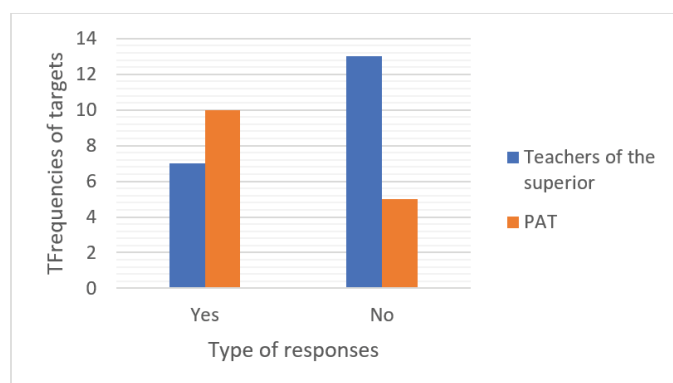

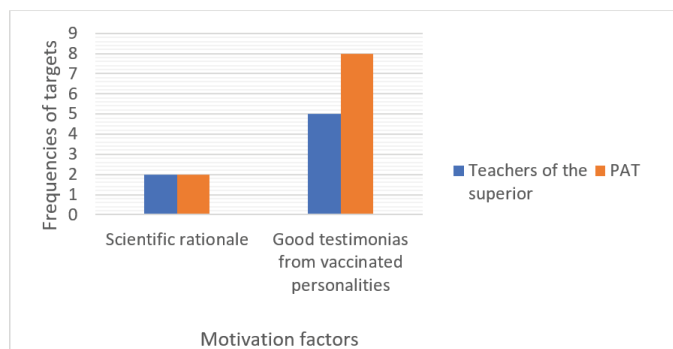**Figure 6.** Campaign-related Target Vaccination Frequencies

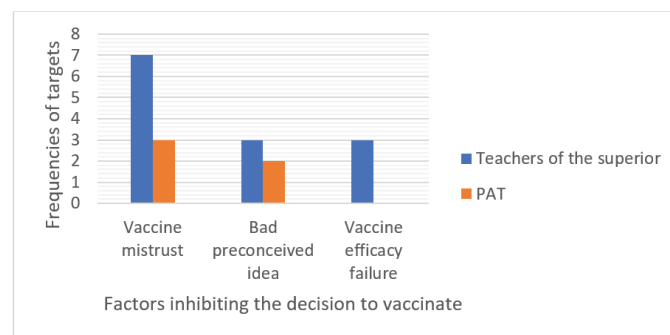**Figure 7.** Number of targets vaccinated by motivation factor used during the campaign

Figure 8. Factors inhibiting vaccination decision

authorities at the Université Félix Houphouët Boigny are considered to be moderately involved. The Teachers-Researchers, the Researchers and the PAT are considered to be poorly involved in the project. As for the students, the actors consider them very involved in the implementation of the project.

Following the evaluation of the mobilization by the implementing actors, it is noted that some target categories do not take ownership of the mobilization strategy. It is important to examine the effectiveness of each activity in engaging different stakeholders within the community. It is essential that all stakeholders are involved in an event that will be truly successful. If some stakeholders are excluded or not sufficiently engaged, it can have a negative effect on how an activity is perceived as successful.

Thus, the present study is part of a methodological perspective of self-evaluation by self- criticism. Self-assessment is based on the perception of participants [9]. This is called self-assessment through self-criticism. Self-assessment by self-criticism is a theory whereby individuals evaluate their performance and behaviour based on the comments and criticisms of others. This theory of learning was developed by Festinger, Rosenfeld and Schachter (1956) in their research published in their book «Social Comparison Processes». This theory argues that when we self-evaluate, our motivation to act takes over and helps us achieve our goals and feel good. It is based on the idea that people learn best when they are aware of their successes and failures, and take time to reflect on their performance [10-12].

Its application to the AFROHUN-ARPA project involves looking back at past experiences and examining them from a critical perspective, wondering how actors could have acted or reacted better.

Conclusion

Community engagement efforts are an important part of any successful organization strategy. It is important to evaluate these efforts in the sense that organizations can identify areas for improvement, recognize strengths and develop plans for future success. This is the approach that led to the study. Indeed, the perceptions of stakeholders regarding the levels of target involvement vary according to the target categories. University authorities at the Université Félix Houphouët Boigny are considered to be moderately involved. The Teachers-Researchers, the Researchers and the PAT are considered to be poorly involved in the project. As for the students, the actors consider them very involved in the implementation of the project. This indicates that the engagement strategies have had varying degrees of impact on these different targets.

If the project activities were to continue, a reorientation of the mobilization mechanism of the university authorities, the teachers of

higher education, the PAT, representing important links of changes in behavior in the academic environment, would contribute to a qualitative leap in achieving the objective set by the Ivorian government.

Conflicts of interest

The author declares no conflict of interest.

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