Journal of General Education and Humanities
Vol. 3, No. 2, May 2024, pp. 143 – 156, https://doi.org/10.58421/gehu.v3i2.195
ISSN 2963-7147

Scientific Culture Organisational and Professional Identity: A Systemic Game of Contexts and Subjects

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Article Info

Article history:

Received 2023-11-15
Revised 2024-03-12
Accepted 2024-03-25

Keywords:

Disciplinary identity
Homogenisation
Professional mobility
Scientific culture
Scientific organisations

ABSTRACT

In theory, a scientific stratification (branches and disciplines) is frequently associated with the effectiveness of research groups but not professional mobility and other psychosocial factors. The study analyses the relationship among the organisational cultures specific to each field of speciality (human-social sciences versus exact-natural sciences), the satisfaction of researchers and the homogenisation of psychosocial behaviours with the mediation of the professional mobility variable; that is to say, the construction of organisational/disciplinary identities within the scientific system. Quantitative and qualitative techniques were used. Among the first, two questionnaires were used; among the latter, we used non-obstructive observation and interviews. This research concluded that Scientists' psychosocial responses and achievement levels vary according to their speciality areas, highlighting distinct disciplinary and organisational cultures within the scientific community. Dissatisfaction with team leadership is widespread across scientific disciplines, driven by factors such as effort, expectations, and societal influences, necessitating the development of transformative competencies, particularly leadership skills, to address these issues and promote well-being among scientists.

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1. INTRODUCTION

The problem falls within the field of psychosociology of scientific organisations, an environment where –according to the theory– stratification and communication within the system play an essential role. However, in the literature focusing on stratification (branches and disciplines), these areas are frequently associated with the productivity or effectiveness of research groups and not with professional mobility and other specific psychosocial factors [1], [2], [3].

The present research has as a point of reference –the study carried out by UNESCO [1] and, more specifically, the model which analyses the impact of organisational cultures

in the homogenisation of successful behaviours and their associated factors [4], [5], [6]. The objective is to investigate the organisational identities within the scientific system while considering the differences that characterise the social and human sciences compared to the exact and natural sciences (resources, productivity and severity of evaluative practices). Organisation theory has not systematically considered different types of organisations; however, it was evident that universities –the environment where the study is carried out with professors/researchers– differ significantly in structure from industrial or governmental institutions [7], [8].

By summarising [9], the most important differences can be brought together under three aspects which appear with vital significance:

1. In contrast to industry, the legal status of university organisations can be considered the organisational umbrella hosting a diversity of institutes or departments that are more or less independent and constitute independent organisations on a small scale. In several Western European universities, most power structures (university authorities) comprise units formed by a single university professor, assistant, and associated staff.
2. In contrast to industry, fewer structural conflicts of interest exist between organisational goals and individual objectives. The goals of an academic organisation are probably better achieved if we give the scientist, individually, the autonomy to realise his expectations, which have been transmitted through academic socialisation and internalised. In the same sense, academic organisations have an excess of time and ideas which remain at the exclusive disposal of the members of the scientific academy [10].
3. Finally, the "...offices –Weber asserts– of the heads (leaders) of the previously mentioned units are equipped with more factual power and decorated with a more important symbolic badge than for any other office of a head at one level comparable in non-academic institutions. The role of a university professor is more similar, in structural terms, to the role of top management than to the role of the director of a laboratory or a department of an industrial firm" (p. 97) [9], [11]. In sum, academic units are characterised as incomplete organisations with a combination of high-level supervisors and low-level subordinate positions, and where the research goals of the organisational umbrella (the university) are achieved if members follow their values and professional interests.

In this way, academic organisations exemplify the nature of cooperation and the morals of organisations postulated by approaches to human relations in industrial companies. Academic organisations are cooperative because there would not necessarily be a structural conflict between the organisation and its members, and they are moral because they rely on intrinsic motivation and aim to satisfy service goals to society.

The general thesis underlying this analysis of academic units can be synthesised in the light of the structure and purposes of academic organisations, a *sui generis* power and authority [12].

What has just been said concerning academic organisations seems to be able to be extrapolated to the world of scientific organisations or, as in our case, to small

organisations (research and development -R+D- units inserted in the university context). Science constitutes a real system to which "subsystems" would be added [13].

This is confirmed by Andrews [1], referring to the International Comparative Study cited above (UNESCO), when he argues that "…the analysis leading to the particular definition of Topology arises from the examination of the performance patterns of R+D units". For example, R+D units in medical or social sciences tend to be relatively better qualified in the output (published documents), while R+D units in technological sciences tend to stand out from others concerning the production of patents and prototypes [14], [15], [16].

Indeed, differences of this type are not surprising and reflect the expected differences depending on the goals for which the research units were formed and the already well-known traditions characterising the different scientific disciplines. This is why the author speaks of sub-populations of research units defined by the type of institution (academic, private company, etc.) and scientific branch [1]. Finally, talking about subsystems, subpopulations with scientific fields and their branches as their central axis, implies the homogenisation of disciplines [17], [18].

Let us extrapolate the statements regarding academic units [4]. Following this line, we can state that fields of scientific speciality would generate several identities based on their stratification. We should thus observe a homogenisation among scientists or teacher-researchers in training coming from fields of similar disciplines (sub-disciplines contained within disciplines) and a heterogeneity compared to scientists inserted in other scholarly fields, even if they have other characteristics in common. Everything would happen as if these researchers who fall into a field of speciality, while being different by a multiplicity of factors, were led to resemble each other, think, act, and feel similarly. In other words, this scientific identity would ultimately be more important than the social identity acquired outside the academic-scientific system, which refers to subgroup membership [19].

We usually classify people, including ourselves, placing them in groups based on the most notable characteristics that distinguish them and, at the same time, allow us to distinguish ourselves from groups that differ from the ethnogroup. Once classified, we evaluate, compare, and sometimes bias judgment favourably toward our group. Thus, to achieve achievements and maintain self-esteem, we boost our social identity by perceiving our group as better.

Furthermore, by categorising, we contribute to forming stereotypes or simplified images that circulate and make it easier for us to act because we assume that the group members (here, scientists) share specific characteristics and behaviours. In this way, differences between members of different groups are magnified, and differences between members of the same group are minimised. "They" are the same, and we are different from them [20], [21].

The image of the scientists from different fields –hard and soft sciences that emerge in this study– is widespread. If we were to ask at random what characteristics they would attribute to each group according to the disciplinary field as well as to their leaders/bosses [22], we would expect answers that are in line with the findings; they would confirm our expectation or self-prophecy fulfilled [23], [24].

The above would show that a particular scientist stereotype could be hypothesised. However, the topic –important due to its consequences at different levels– is beyond the objective of this study. Here, we will try to visualise what is happening inside the academic-scientific organisations in the Argentine national universities while analysing psychosocial factors and, more specifically, satisfaction grids about the fields of disciplines.

In the same way, considering that we have not found literature directly linking satisfaction to professional mobility in scientific organisations and that it could be associated with differentiated satisfaction about the different factors, we have incorporated it as the reference axis of this study. This decision was taken because socio-professional mobility is part of the Argentine culture. Let us remember that this is a country of high mobility where "making America" was possible and is going through its most severe structural crisis in recent years. In effect, during the last century, education was seen as an investment (Consumption/Investment Theory) [25], [26], [27].

This could influence all the factors involved: satisfaction, occupational mobility, psychosocial and socio-cultural factors such as anomie, fatalism, falling expectations and scientific production due to demoralisation and economic problems. This is the typical case of the interactionist model [28], where the social structure imposes barriers to progress legitimised by the position occupied on the professional pyramid, even if the conditions of productivity and quality are met by the individuals (anomie) [29], [28]. In such a context, we can expect that the mediation of this variable, particularly affecting Argentine scientists, modifies the relationships of the variables in play and their appearance, depending on the levels of mobility achieved and the responses of dissatisfaction associated with them. In other words, the levels and factors of satisfaction would vary among scientists depending on the level of concrete mobility.

We can also expect that with a significant level of success (considered by their position on the professional ladder) implying a more significant investment in effort and major costs involved, scientists expect greater profits ("investment" model) [25]. The difficulty in accessing expected levels could currently accentuate dissatisfaction among the most mobile groups, with those responsible for managing the system [30], [5]. The identities are undergoing a "fracture".

The question is undoubtedly complex. It combines psychosocial, economic and socio-cultural perspectives. Furthermore, the controversial discoveries –frequent when working with psychosocial and structural variables in their permanent exchange– and the need to know how, nowadays, mobility influences the satisfaction of groups of scientists from different fields have encouraged the completion of this study [31], [16]. Here, the author presents her systemic theory of three levels in dynamic games, entitled *The Three-Dimensional Spiral of the Sense*.

Let us dwell on some characteristics of the research carried out in Argentina, which is the basis of this article. This study, "Scientific Research: organisation and quality of Research Units (R+D UNITS), " is based on the International Comparative Study by UNESCO between 1971 and 1989 in many countries, including Argentina. We worked on two levels: macro and micro [15], [31], [16], [32].

We will refer here to the discoveries we reached in the micro aspect, an aspect without which it would have been impossible to access the psychosocial side (intervening variables) in its interaction with the structural side. As for the study carried out on the macro level, this is the first study with national data from the National System of Science, Technology and Innovation and, more specifically, from the Support Program for Professor-Researchers since its implementation in 1995 in national universities.

The central variables covered a wide range (institutional, personal, production, extension and transfer). Internationally developed hypotheses relating to scientific organisations were then tested. The product was a comprehensive diagnostic table of the situation in Argentina in terms of Science and Technology within the framework of the Reference Program. As we can see, until this moment, the psychosocial dimension has not been addressed.

Let us analyse the sub-project that concerns us (micro plan). The hypotheses which guided it, within the framework of the national program, were: the logic of action and, in particular, the levels of satisfaction, commitment, and the associated response mechanisms could vary according to professional mobility and according to areas of speciality. More specifically:

a) The scientific organisations –classified according to the fields of speciality cited above– would generate habits, representations of the value of work and their levels of satisfaction, which would identify them among themselves and differentiate them from groups working in other areas of knowledge (identity) [33];
b) the type of scientific organisation, associated in turn with different levels of socio-professional promotion, would influence the "reproduction" of "cultures" and behaviours (collective work habits, mental and action structures, social representations);
c) membership in a scientific organisation of a speciality or another field (i.e. "hard" or "soft" sciences) would result in "differential identities". It would be towards homogenisation of certain psychosocial behaviours linked to satisfaction levels among scientists who work in joint fields of activity and, conversely, towards more significant heterogeneity among those who work in different fields of speciality. Scientists, by sharing the specific rules of the organisational subculture associated with "hard" or "soft" sciences, would manage to resemble each other in their way of thinking, valuing and acting [30], [16], [34], [35], [36], [37].

Finally, as can be seen, several theories were used in this article: the "Investment" / "Consumption" Theory, the Expectancy-Valence and Motivational Theory, the Anomie Theory, the Leadership Theory and the Identity Theory. We do not dwell on them in order as soon as possible. They will be recovered in the Discussion Section.

2. METHOD

2.1. Sample

We developed a stratified sample of R+D units by university and discipline based on the national population of professor-researchers of the Support Program, divided into

metropolitan and Cuyo regions. 1,511 R+D units finally shaped it. The sample was finally formed by N= 355 units of R+D Units (5% error margin). Initially, we worked with a sample of professor researchers from the National University of Cuyo /Conicet (N= 53 Research Units), integrated by their chiefs, directors, and central members. The analysis strategy was macro-micro-macro. Following international definitions in this area, we worked with each R+D unit and its prominent members (researchers in training, scientists and technicians).

2.2. Techniques

Quantitative and qualitative techniques were used. Among the first, two questionnaires were used; among the latter, we used non-obstructive observation and interviews. In this paper, we will focus on quantitative analysis. Then, we cross-referenced the data [38]. Let us see the questionnaires.

1) The Research+Development unit questionnaire (henceforth R+D Questionnaire) was only applied to the Chief / Directors, who responded with data concerning the R+D unit (institutional and financial resources, human resources, age of R+D units, national and foreign sources of income, scientific exchanges of the units and product of the research unit, among others).
2) The so-called MC Questionnaire (prominent members) is part of a series of tools that provide relevant data on the members who comprise the R+D units and the concrete organisational modes linked to their quality. It includes objective data (personal and institutional-sectorial profiles), opinions and social representations of the members of the R+D units based on the levels of personal participation in the different research activities, the working climate (dedication, cooperation, interference, etc.), employment (pressures, responsibilities, commitment, etc.). As well as opinions about the budget means and services available to the unit, as well as satisfaction with the leader (frequency of reports, effects of these on scientific performance, professional skills) [22], OECD [39]. It also includes representations [33] on power and influence in decision-making, on the organisation of research work, on professional relationships inside and outside the institution (frequency, effects on the performance and satisfaction), self-perception of the importance of the type of product for the objectives of the R+D unit and satisfaction with the dissemination of results. It finally made it possible to identify representations concerning the R+D unit's effectiveness and productivity capacity, design innovative contributions, and respect quality standards [40]. The questionnaire was completed by all core members of the research team, including trainee researchers, scientists, and lead scientists (chiefs /directors).

2.3. The grids

We proceeded to develop grids and indexes from the responses obtained in the sections corresponding to the variables of the MC survey (for the prominent members), and we proceeded to cross-reference them with other psychosocial variables and with mobility professional as the primary indicator of success in the scientific-academic environment because it synthesises the entire path and effectiveness.

As far as we are concerned, we have developed seven (7) central satisfaction grids which we will return to later: Central Satisfaction grids (Grid L: About the job; Grid N: Satisfaction with chef of research units; Grid O: Planning and organisation of research activities in the unit; Grid I: Responsibility); a Product grid and a Professional Mobility grid were developed (cf. link Conicet, Aparicio, 2014, 2015 b, 2022 b). Moreover, we have developed a Product Grid.

2.3.1. Professional Mobility Grid

We built it by considering the following:

- Position in the research group: Leader / Chief / Director – Member.
- The position in the academic system combines position and status (full-time, semi-full or part-time). It included all academic categories defined by the national system, ranging from tenured, full-time competitive professors to part-time supervised work leaders and assistant professors.
- Seniority in position: 1) 5 years; 2) 6 to 10 years; 3) 11 to 15 years old; 4) 16 to 20 years old; 5) 21 to 25 years old.

Table 1. Mobility Index

	Minimum	Maximum	Mean	Deviation
Index Mobility	4.67	100.00	53.9911	25.5363

2.3.2. Satisfaction Grids

Points were assigned to the items on a Likert scale of 1 to 5, with 5 being the most favourable situation concerning the question posed and 1 being the most negative. The subject had to give his opinion on each pair of opposite assertions (X-Y) by ticking the following criterion: 5. X applies. 4. Trend to X. 3. Intermediate. 2. Trend to Y. 1. Y applies.

The indexes were calculated as the sum of points obtained in each of the corresponding items by dividing the product of the number of items x 5

$$\text{Index} = \frac{\text{A sum of points from each item}}{\text{Five times the number of items}} \quad (1)$$

The following table summarises the defined Satisfaction Indexes and a descriptive analysis of the latter, ranked according to their mean satisfaction.

Table 2. Index of Satisfaction

	Minimum	Maximum	Mean	Deviation
Planning	50.77	100.00	88.7590	10.0119
Working Atmosphere	44.71	96.47	80.5409	10.5910
Supervision	2.50	100.00	74.3000	26.2832
Level of Satisfaction with peers	6.67	100.00	63.4234	25.2896
Materials Factors	21.54	92.31	61.9982	14.7697
About your Job	35.00	91.67	61.6858	12.2830
Responsibility	10.00	100.00	58.7059	28.0216

As can be appreciated, the highest Level of Satisfaction appears in the variables Planning (88.75) and Working Atmosphere (80.54), with the Career Mobility Index being among the lowest (53.99). We have also constructed other grids: product, recognition, etc., on which we cannot stop here, and a General Satisfaction Index.

It is not described below that the satisfaction grids and their indicators, which have correlations with mobility and discipline fields, proved significant.

Grid L: About your Job

This set of 12 questions relates to feelings about one's job. Opinion on these issues had to be indicated by selecting a number for each pair of opposing assertions, designated below: Job security, Intention to leave the unit, knowledge of performance opinion, Time additional volunteer, Level of responsibility, Pressure of the "time" factor. Other employment opportunities, Remuneration. Prospects of promotion.

The mean index (or mean satisfaction) was 61.68, with a standard deviation of 12.28, which implies a moderate level of satisfaction concerning the variable.

Grid N: Satisfaction with R&D unit Chief

It has eight items. He had to indicate his opinion on these eight questions by choosing the number most accurately describing his feelings and satisfaction for each pair of extreme affirmations. It includes the degree of satisfaction with the manager's competencies, his personality and character, his leadership qualities, the amount of work he performs, the support for the researcher's work, etc. [10].

The index varied between 2.50 and 100.00. The mean index (or mean satisfaction) was 74.30, with a standard deviation of 26.28, indicating a high level of satisfaction concerning the variable.

Grid O: Planning and organising research activities of R&D units

She presents 13 items. The subject had to characterise the organisation and planning of the unit's work, choosing a number for each pair of opposite statements consigned: Interest in research activities, Scientific significance, Potential success of the application, Establishment of the unit budget, Coherence of research program, Rapports with potential users, Social usefulness, among others.

The index varied between 50.77 and 100.00. The mean index (or mean satisfaction) was 88.55, with a standard deviation 10.01.

Grid I: of Responsibility /Attributions

It included Acceptance of the level of responsibilities, Extra time (volunteer) devoted, Acceptance of personal responsibility in results, and Rejection of attribution of results to chance-related factors independent of effort.

The mean index (or mean satisfaction) was 58.70, with a standard deviation of 28.02, indicating one of the lowest average satisfaction levels concerning the variables considered.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Correlation between Professional Mobility and Satisfaction Indexes

After elaborating on the grids and calculating the indexes, the correlation between the mobility index and the various satisfaction indexes was established.

Table 3. Correlation between Professional Mobility and the Indexes of Satisfaction

	Working atmosphere	About your Job	Responsibilities	Material factors	Supervision	Planning	Level of Satisfaction with peers
Index of Mobility	.086	.370***	.407***	-.013	-.436***	.276**	.028

* Significant Correlation of 10% (p< 0.10).
** Significant Correlation of 5% (p< 0.05).
*** Significant Correlation of 1% (p< 0.01).

Concerning mobility –without distinguishing between "hard" and "soft" sciences yet– we notice a significant positive association with the indexes of satisfaction with everything assuming Job, Responsibilities inherent in the task, planning and one negative correlation with Supervisor/Director/Chief.

3.1.2. Correlation between Professional Mobility and Satisfaction in "Hard" and "Soft" Sciences

Table 4. Correlation between Professional Mobility and Satisfaction Index. Exact Sciences ("hard sciences")

	Working atmosphere	About the job	Responsibilities	Materials factors	Supervision	Planning	Level of Satisfaction with peers
Index Mobility	.040	.488***	.576***	.011	-.455***	.278	.038

* Significant correlation of 10% (p< 0.10).
** Significant correlation of 5% (p< 0.05).
*** Significant correlation of 1% (p< 0.01).

About Professional Mobility, a positive significant association is observed with Job-related Satisfaction Indices (0.488 at 1%), responsibility (0.576 at 1% confidence) and a negative with Supervisor/Chief (-0.455 or 1%).

Table 5. Correlation between Professional Mobility and Satisfaction Indexes. Social sciences ("soft sciences")

	Working Atmosphere	About the Job	Responsibilities	Material factors	Supervision	Planning	Level of Satisfaction with peers
Index Mobility	.122	.233	.180	-.013	-.456**	.354**	.030

* Significant correlation of 10% (p< 0.10)
** Significant correlation of 5% (p< 0.05)
*** Significant correlation of 1% (p< 0.01)

Regarding professional mobility and among the "soft sciences," we find only a significant and negative association with the satisfaction index with supervision (-0.456 to 5%) and a positive association with planning (0.354 to 5%).

Let us analyse the correlation table (Pearson's R). We observe that the significant associations turned out to be different at 1% and 5% between vocational mobility and satisfaction in the "hard" and "soft" sciences table, respectively, shows that the two groups of disciplines -even if they are all researchers- value different aspects while maintaining a specific identity within their disciplines.

In other words, the most mobile subjects in the "soft" sciences find satisfaction in various dimensions that seem to be associated with the logic of the discipline: the transfer of results, usefulness, etc.; on the other hand, those working in the "hard" sciences value, above all, responsibility and factors measured through the "job" grid such as performance, commitment, compensation, promotion prospects, and so on. What has just been exposed is congruent with what is supported in the theoretical framework in light of different models or approaches. The only variable where there was a coincidence is satisfaction with the head. The more mobile groups of the two disciplinary fields appeared more dissatisfied with those at the head of the research teams.

3.2. Discussion

In synthesis: a) Scientists' psychosocial responses and achievement levels (viewed here from the point of view of promotion or mobility within the system) are not independent of areas of speciality; b) a certain homogenisation in certain psychological and psychosocial behaviours is confirmed among scientists working in joint fields of activity; c) the most movable subjects in "hard" sciences find satisfaction in some aspects –typically present in their discipline– which are different from those in "soft" sciences [17], [18]. This would show a disciplinary/organisational culture in the scientific field. There is only one aspect in common: researchers from both fields feel unsatisfied with team leadership [22]. This unexpected result could be interpreted from different points of view and in light of several theories and models.

According to the "Investment" / "Consumption" Theory [25], [26], [32], the greater the investment in effort and the greater the expectations of achievement placed on

education as a factor of achievement, the greater the benefits expected to be obtained by achieving the goal. In the field of science, in general, mobility within the hierarchical scale is achieved through severe annual evaluations by peer evaluators according to the quality and quantity of production. This entails effort and high expectations, adding to system demands to achieve these goals. When structural barriers due to political-economic situations –despite having achieved career advancement– do not provide all the expected possibilities of achievement and production, the frequent response is dissatisfaction, disappointment, and fatalism. This is evident concerning those who lead the R&D units (both in the "hard" and "soft" sciences).

The Motivational Theory of Expectancy-Valence [41] indicates that the greater the expectation placed on a goal and the greater the valence or value given to the goal object to be achieved, the greater the tendency to "depression" or dissatisfaction in the case of not seeing your goal crystallised—he who waits for despairs. The researcher who reaches a relatively high position within the system expects more from the system and his bosses [26], [27].

According to the Anomie Theory [42], [43], in Merton's version, anomie is produced by the distance between the institutionalised means and the goals to achieve them. This distance results in deviant behaviour (among them ambivalent anomic nonconformity) and even suicide.

In Argentina, anomie is growing, as statistics show incessantly [44]. The situation also impacts scientists. Production (papers) decreases due to a lack of resources. All of this generates dissatisfaction, with complaints frequently directed to the boss.

According to the Theory of Leadership, [10], [13], [22], [32], [34], [36] considered an essential social competence today, it is still worrying that so many scientists in the field of "hard" sciences and "soft" sciences are dissatisfied with their leaders (bosses/directors). This would show a gap in forming this social or psychosocial competence among those who have reached high positions within the social system. Skills and competencies are essential today. They involve mobilising knowledge, skills, attitudes and values to meet complex demands".

The OECD distinguishes between three types of skills: cognitive and meta-cognitive skills; social and emotional skills; and practical and physical skills". Among them, leadership is essential. We cannot expand on the topic, but it invites reflection on forming transformative competencies, which are fundamental to facing future demands and increasing well-being in our lives (cf. OECD Learning Compass 2030 [39] and some primary authors: [45], [46], [47], [48], [49], [35].

According to the Identity Theory [5], [16], [30], [37], this is a weave between the biographical and the relational plane. If the context does not offer possibilities for personal/professional fulfilment and growth or achievement in the occupational field, the identity of the subjects (chiefs and prominent members) is strongly affected. The impact of the structural facet (macro societal level) on the psychology of the individual (micro level) and the lack of recognition even leads, in some fields, to abandon the profession and look for other paths. Numerous articles by Aparicio can be seen. Cf. Link CONICET [30], [37],

among others. Finally, our hypothesis about diverse scientific-organisational cultures according to disciplinary fields of belonging was confirmed.

4. CONCLUSION

In summary, scientists' psychosocial responses and achievement levels are intricately linked to their speciality areas, indicating a disciplinary and organisational culture within the scientific field. While there is a certain homogenisation in psychological behaviours among scientists in standard fields, dissatisfaction with team leadership is shared across different scientific disciplines. The Investment/Consumption Theory elucidates how effort and expectations influence satisfaction, particularly when structural barriers hinder career advancement despite high investment. Similarly, the Motivational Theory of Expectancy-Valence highlights the correlation between goal expectations and dissatisfaction, especially among those in higher positions. Anomie Theory underscores the impact of societal factors on deviant behaviour and dissatisfaction, with growing anomie observed among scientists, particularly in Argentina.

Furthermore, the lack of satisfaction with leaders among scientists in both "hard" and "soft" sciences indicates a gap in forming essential social competencies among high-ranking individuals. This discussion prompts reflection on the necessity of transformative competencies, including leadership skills, to meet future demands and enhance well-being. Ultimately, the Identity Theory emphasises the interplay between personal identity and occupational context, with dissatisfaction potentially leading to career changes. Overall, these findings confirm the existence of diverse scientific-organisational cultures based on disciplinary fields and underscore the complex interaction between societal structures and individual psychology within the scientific community.

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