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The stealth legitimisation of a controversial policy tool Statistical profiling in French Public Employment Service (PES)

Alizée Delpierre, Didier Demazière, Hajar El Fatihi

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Abstract

Statistical profiling algorithms claiming to predict which jobseekers are at risk of becoming long-term unemployed are spread unevenly across countries. However, the pathways and histories of these tools are understudied. Because the profiling path in France is a winding one, it is fruitful to study the production of profiling acceptability within the Public Employment Service (PES), and upstream of its reception by frontline advisers. Using a mix of interviews and written sources, we show that the production of profiling acceptability sits at the crossroads of two processes: technical and political transformations of the instrument itself and broader institutional and managerial transformations of the PES. On the basis of this case study, the paper enriches our understanding of the slow and incremental rationalisation of public services that we have termed 'professional rationalisation'. We argue that, far from being a softened or moderated form of bureaucratic rationalisation, it is powerful – perhaps even irreversible – precisely because it transforms its target (frontline advisers) before the rationalisation instrument is even deployed.

Keywords: Statistical profiling – French PES – Rationalisation – Unemployment – Frontline staff – Policy instrument

Statistical profiling is a modelling tool used to calculate the risk of remaining unemployed. In response to the growth of long-term unemployment, its implantation in Public Employment Services (PES) has been widely promoted by international organisations (OECD 2018). Statistical profiling targets unemployed people at risk and is supposed to accelerate the return to employment, combat inequalities between unemployed people, and reduce the costs of supporting and compensating the unemployed (Martin & Grubb 2001). It is also often considered an objective, fairer and more effective way of segmenting jobseekers than previous caseworker-based profiling practices (Loxha & Morgandi 2014). First implemented in the United States in 1993 (Black *et al.* 2001), unemployment profiling techniques were driven by the European Employment Strategy. During the 2000s, the tool was integrated into labour market policies in various European countries, though at different rates and with different outcomes. The UK and Austria have experimented with it earlier, under austerity policies (Allhutter *et al.* 2020), and it has been strongly implemented in Ireland (O'Connell *et al.*, 2012), Sweden (Loxha & Morgandi 2014), Poland (Niklas *et al.* 2015) and Croatia (Bejakovic & Mrnjavac 2018) – but rejected in Denmark and Finland (Riipinen 2011; Rosholm *et al.* 2004).

Profiling tools are unevenly rooted in the national PES, and little information on implementation conditions and methods is available. The abovementioned studies do not describe the processes that lead to success or failure, adoption or rejection. Yet, given that we know statistical profiling concentrates major tensions, its acceptability is an enigma. On the one hand, within a context of strong PES reforms in OECD countries, recourse to this tool seems inevitable – not only because it is becoming an international standard, but also because it offers

a functional response to a generalised increase in unemployment rates. On the other hand, this instrument has consequences for the work of frontline advisers: profiling algorithms threaten their human expertise and subjective assessment, opening up potential controversy and/or resistance (Brodkin & Marston 2013). Since statistical profiling seems an unavoidable (though contestable) instrument, we explore the manufacture of its acceptability.

We have chosen to study the profiling acceptability process through the French case, which is often neglected in international comparisons. Our fieldwork shows that the profiling path in France is a particularly winding one. Profiling was introduced suddenly, leading to interinstitutional and political conflicts, and was then abandoned. In the end, however, it was reintroduced through a wider PES digitalisation movement and became part of frontline advisers' everyday work. Analysis of this tortuous pathway lies at the heart of this article's empirical contribution, enriching the literature on PES transformations by observing a more discreet – but no less important – aspect of the activation turn observed elsewhere (Immervoll & Scarpetta 2012). Our aim is to understand how the acceptability of profiling has been produced and to identify the main mechanisms underlying this phenomenon. We also have a wider objective, situating our case study in the vast field of public action instruments (Lascoumes & Le Galès 2007). From this perspective, we consider the introduction of statistical profiling as a rationalisation of public services and frontline work within the PES. At a theoretical level, then, we intend to show that the slow and discreet introduction of statistical profiling represents a specific form of rationalisation, which we have termed 'professional rationalisation'.

We begin with a discussion of the current literature on statistical profiling and argue for an approach based on public action instruments. Next, we present our qualitative methodology, which relies on a wide range of written documents, as well as interviews with multiple actors; these provide information on the historical depth of statistical profiling within the French PES. We then describe the French context, in order to underline certain major PES transformations concomitant with the development of statistical profiling. This leads us to identify three stages in the acceptability process: (1) the sudden and politicised introduction of this tool, fuelling competition between benefit and support agencies for unemployed people; (2) the removal of profiling from the official PES agenda and public debate at a time in which profound change was underway at the PES, and (3) the reintroduction and dissemination of profiling tools by stealth, hidden among a set of digital tools designed to structure the work of frontline advisers. Lastly, we show that our diachronic and organisational approach sheds light on both the rationalisation of public services and the transformation of frontline work.

Analytical framework

Multiple aspects of PES transformations have already been described, including the activation turn (Eichhorst *et al.* 2008), labour market reforms (Clasen & Clegg 2006) and the introduction of new public management principles (Weishaupt 2010). Surprisingly, profiling tools occupy very little space in this set of analyses, even though researchers from several disciplines (such as sociology, economics, and STS) are particularly interested in them. Thus far, research on statistical profiling has focused on two main questions: how the algorithms are built, and how effective they are at predicting – and avoiding – the risk of long-term unemployment.

Profiling methods were first tested in 1993 in the United States and quickly spread to Australia, the United Kingdom and Canada (Colpitts 2002; MacDonald *et al.* 2003; Henman 2004; Grundy 2015). The European Employment Strategy gradually pushed other countries to turn to

profiling (Netherlands 1999, Denmark 2004, Germany 2005, France 2006, etc.). Though international comparisons show significant diversity in terms of the methods adopted across countries (Caswell *et al.* 2010; Loxha & Morgani 2014; Desière *et al.* 2019), they pay little attention to their dissemination within organisations serving unemployed people. They compare, for example, the range of variables included in estimates, the quality of the information recorded, the statistical modelling methods, or the geographical scales of risk calculation. These studies reveal the fragmentation of profiling methods in terms of technical solutions adopted.

Profiling is also often assessed in terms of access to employment and avoidance of long-term unemployment (Englert *et al.* 2014; Hasluck 2008). Initial results from the United States show that profiling improves the rate of return to employment and reduces PES costs (Black *et al.* 2003) – but other studies highlight unintended effects. In the Flanders case, for example, the profiling tool discriminates against jobseekers of foreign origin (Desière & Struyven 2021). Another study in Poland shows that the algorithm is founded on a normative conception of the ideal jobseeker (Sztandar-Sztanderska & Zielenska 2020). In focusing on job search intensity and motivation to work, profiling differentiates between unemployed people, judging their attitudes and behaviours. These analyses (all of which concern contexts in which profiling has already been implemented) shed light on how profiling tools operate, as a result of either their technical properties or their effects (whether intended or not). The intrinsic characteristics of profiling are studied without questioning its organisational environments.

Our research question goes beyond these perspectives: what is the profiling implementation process in the French PES, and what are the conditions of its deployment? Even though statistical profiling has become organisationally routine in most European PES, this question has been little studied. A few analyses cover failures but fail to address their causes: profiling was rejected in Denmark and Finland, but we don't know whether this was because of public expenditure cuts, frontline worker resistance, or the uncertain effectiveness of the tool (Riipinen 2011; Rosholm et al. 2004). Conversely, frequent successes are highlighted by studies that focus on the effects of profiling, rather than their implementation process. Thus, we don't really know what led to such success. How did the implementation of statistical profiling take place? Our objective is to study the production of profiling acceptability in a context in which its implementation was controversial. The French case is emblematic: profiling unemployed people was violently contested by both frontline advisers and PES management – yet was then generalised without causing any clashes. What led to this complete reversal and the production of such acceptability?

By tracing the processes of profiling acceptability, we contribute to studying the introduction of technologies into public services as an argument for improving efficiency. The dominant approach focuses on impacts on the well-established discretionary power of frontline bureaucrats (Tummers & Bekkers 2014; Meyers & Vorsanger 2003). Some studies suggest that frontline workers use technology as a resource for action (Jorna & Wagenaar 2007; Buffat, 2011), but most underline the discomfort these workers experience (Nordesjö *et al.* 2022). Few address issues of expertise, increased hierarchical control, the lack of autonomy in supporting unemployed (or other) users (Pors 2015), or the reluctance 'to say 'no' to a computer' (Sztandar-Sztanderska & Zielenska 2022). These studies underline the consequences of technologies on professional work, raising the following question: to what extent does statistical profiling replace, complement or undermine caseworker profiling? While this approach is a fruitful one, the French case offers an opportunity to study the acceptability of profiling, upstream of its reception by frontline advisers. Indeed, the troubled history of profiling is

conducive to the identification of factors that are less visible in the (more usual) cases of rapid acceptance or rejection. This leads to an emphasis on organisational and institutional dimensions — which is the meaning of the expression 'production of acceptability'. Our hypothesis is that the acceptability of such tools does not arise solely out of their reception by users (PES advisers): the features and design of these tools — as well as how they are introduced into both the organisation and a broader institutional policy — play a significant role in their acceptability.

We adopt a processual perspective, following the stages, turns and reversals of profiling implementation, embracing a broad focus to capture all of the actors and organisations involved in this path. We rely on the public action instruments approach (Lascoumes & Le Galès 2007; Hood, 2007). For this research stream, the term 'instruments of public action' refers to any concrete device (such as statistical nomenclatures, methods of calculating resources, activity management tools and social categorisations of people) which makes it possible to deploy public action and thus organise relations between public authorities and citizens. Profiling algorithms can thus be considered such, since, beyond calculation of the risk of long-term unemployment, they divide jobseekers into categories, associate differentiated service offers with these categories, and frame the work of advisers. Both the policy instruments and the public policies they support have been analysed at different moments in their deployment, including: the moment of choice of an instrument ('Best Instrument of the Year' syndrome, Landry & Varone 2005); that of its revisions and adaptations (the 'technique for calculating the growth of the French civil service wage bill', Bezes 2007); that of the tensions between contestation and institutionalisation (the 'reasonable job' offer, Hervier 2014); that of the consequences and effects on public action itself (the accountability principle in education policies, Verger et al. 2019); and that of abandonment and disappearance (the green currencies of Common Agricultural Policies, Grant 2010). Our own focus is on the production of acceptability. Situating our analysis upstream of its reception by frontline advisers, we get to grips with the relationship between statistical profiling and the in-depth transformation of PES organisation. This perspective leads us to analyse and question rationalisation – not only of the PES but also of public services in general, understood as the formalisation or standardisation of the service provided (and therefore, of the work of advisers), with a view to improving its efficiency (Georges et al. 2009). The slowness and discretion of the acceptability process matter, and appear to be favourable conditions for the deployment of what can (oxymoronically) be termed 'professional rationalisation'.

Data and methods

Our article is based on qualitative fieldwork: we interviewed people playing different roles in the history of statistical profiling in the French PES. We also collected and analysed written documents to retrace both the profiling path and the debates related to it: (rare) parliamentary debates and reports on French PES governance, a press review on PES transformations, trade union websites, blogs, multiannual agreements with the Ministry of Labour, assessment reports produced by the General Inspectorate of Finance, Court of Auditors, Ministry of Labour statistical services (DARES), etc. From *Pôle Emploi*, the employment agency, we collected non-public documents such as internal notes, minutes of meetings, written records of communications within employment experts' seminars, and confidential internal documents.

We conducted interviews with eight stakeholders holding (or having held) decision-making, advisory or management positions in the main employment policy institutions (see next section on PES organisation in France): on the support side ANPE until 2008, *Pôle Emploi* thereafter,

on the compensation side *Unedic* and the Ministry of Labour. Most of our interviewees had had national responsibilities within the past twenty years. Many of them knew each other, and may have cooperated or clashed; some moved between the various institutions; some are still working, while others have retired. Then we continued the fieldwork within *Pôle Emploi*, at different levels and departments of the organisation. We interviewed seven trade unionists working at national level in the two most representative unions, and some of these people also held important positions on the ANPE/*Pôle Emploi* or *Unedic* governing boards. We also met four computer engineers and data scientists, two former middle managers, nine street-level advisers and one longstanding member of the *Mouvement National des Chômeurs et Précaires* - an organisation of unemployed people. We wanted to meet people whose experience of statistical profiling history would differ as a result of their positions in the organisation, and the periods during which they have worked. We completed the fieldwork with observation sequences at a local agency (one day) and at trade unions (one and a half days).

Bringing together these diverse materials, we were able to identify a series of moments in profiling history, as well as various institutional viewpoints and relationships. Interviewee anonymity has been preserved whenever material is quoted; in some cases, this has meant we had to make slight changes to the information provided about their background or precise institutional position.

PES organisation in France

The roots of the French PES lie in the major social ordinances of 1945. In a context of labour shortage, the state monopoly on the support and placement of workers was set up, abolishing private employment agencies. This monopoly was consolidated in 1967 with the creation of the National Employment Agency (ANPE) - a public institution whose mission is to match job demand and supply throughout the country. The 1980s saw the development of training and advisory schemes, alongside a second phase of labour market activation schemes. Management of these was entrusted to the ANPE, whose activity and resources were thus strengthened. The state monopoly was not called into question until the mid-2000s, although marginal outsourcing to private operators did exist as a way of offering an adequate service to certain jobseekers (those with disabilities or illnesses, or who struggle with reading and writing, etc.).

Unemployment benefits were organised independently. In the 1950s, some trade unions sought to introduce compulsory unemployment insurance; this project, which was supported by the *Conseil National du Patronat Français* (CNPF, the national council of French employers), led to the creation of an insurance system in 1958. Its management was entrusted to a national association, *Unedic*, that was created by the social partners. *Unedic* collected and managed unemployment insurance contributions from employers. It also set the rules for compensation (in terms of eligibility, duration and amount) and reviewed them every three years. *Unedic* entrusted both the calculation of individual rights and the payment of benefits to jobseekers to departmental associations named Assedic. These were a second point of contact for jobseekers, exclusively devoted to benefits.

This two-headed PES was first adjusted in the early 2000s (Pelletier, 2010; Pillon, 2017). On the ANPE side, unemployment growth couple with jobseeker flow undermined the monopolistic principle; the outsourcing of support services and recourse to subcontractors gradually developed, until the state finally organised a private placement market. As a result, a debate emerged on the future and effectiveness of public services. On the *Unedic* side, unemployment growth caused a structural financial deficit, and social partners (employers'

representatives and some trade unions) advocated activation of benefits. The idea was to use the benefits paid out as a lever to accelerate the return to work - and thus to make savings. In order to activate unemployed people in receipt of benefits, *Unedic* increased the use of private service providers, fuelling competition with the public operator. The institutional architecture of the PES was thus called into question, and destabilised. These developments led in 2008 to a 'merger': the ANPE absorbed the Assedics and became *Pôle Emploi*. It has a dual mission: to offer unemployed people support and guidance towards employment, and to manage their entitlement to benefits. Supervised by the Ministry of Labour, *Pôle Emploi* is now a one-stop-shop for unemployed people. *Unedic* continues to collect the insurance contributions and sets the benefit rules, with increasing state intervention.

The politicisation of profiling and inter-institutional competition

In the early 2000s, the statistical profiling of unemployed people aroused growing interest among employment policy actors in France. However, ANPE (the support side of the French PES equation), engaged in a major struggle to combat long-term unemployment, did not use statistical profiling, preferring to rely on the expertise of its advisers. In 2005, statistical profiling was suddenly introduced by *Unedic* (the benefits side of the equation), in a bid to make savings on unemployment benefit expenditure. Two levers were used to accelerate the return to work of unemployed people receiving benefits: early identification of those jobseekers at risk of long-term unemployment, and the targeting of autonomous and employable jobseekers to activate them.

The initial introduction of profiling provoked, as one interviewee said, 'stormy, high-conflict debates' that pitted the ANPE against the Ministry of Labour and *Unedic* – two institutions that defended the idea, developed in a report evaluating the PES (Cahuc & Kramarz 2004), that profiling was essential in order to differentiate job search support methods, and thus improve the effectiveness of the fight against unemployment. More broadly, this idea was part of the political agenda shared by *Unedic* and the liberal government, based on hostility towards 'inefficient' and 'costly' public services.

The ANPE management's aversion to profiling was thus a defence against the other organisations involved in the negotiations. Yet their resistance was moderated: the general context was favourable to profiling, and they saw it as a way of alleviating advisers' excessive workloads:

'As for ANPE, they were walking on eggshells because the situation was very difficult. They were no longer able to cope with the surge in new jobseekers. So, the cracks were showing everywhere, and I think some people saw profiling as a way of alleviating the pressure' (Senior civil servant at the Ministry of Labour during this period, who had previously worked at ANPE).

'On the other hand, ANPE had little capacity to resist – first of all, the Ministry was pushing to test profiling, and then there was a lot of talk about it in Europe at the time. So it was difficult to give a hard no.' (*Unedic* executive during this period, who later worked at the public employment agency).

A tripartite agreement signed on 6 May 2005 confirmed two important changes: the implementation and generalisation of profiling, and the use of private operators for those unemployed people with a low risk of long-term unemployment. The most employable unemployed people were profiled to be taken over to the (supposedly more efficient) private

sector. At this point the term 'profiling' turned into a banner brandished by *Unedic*. Three objectives were stressed: the prevention of long-term unemployment, the offer of personalised services and the provision to advisers of so-called 'objective' decision support.

A hybrid profiling method was chosen: statistical modelling by *Unedic*, plus the expertise of ANPE advisers. This hybridisation exacerbated the tensions between the two institutions, since both the credibility and the quality of the work of their respective staff – statisticians on the one hand, caseworkers on the other – were at stake. There were regular clashes between the leadership of the two entities. For example, when ANPE announced that, once qualitative criteria such as motivation were integrated by advisers, they validated only 40-45% of profiling results, *Unedic* retorted that 70% of its assessments were validated by those of ANPE¹. As pointed out by several of our interviewees (from both *Unedic* and the Ministry of Labour), many advisers had a 'distrust of the algorithm'. Resistance was also institutional: there was little encouragement within the PES for advisers to rely on the profiling results. The trade unionists and senior managers we met affirmed that profiling was seen as being of little use in helping advisers define appropriate support.

'We did have instructions, informal instructions, but still, the message was to ease off. We didn't bother employment advisers with this, and discreetly passed on the message that *Unedic*'s profiling was not really our... that is, it distracted us from our job, which was to come up with action plans. Calculating the risk of long-term unemployment tells us nothing about that. Take a self-taught executive who is over fifty, or a young person who is failing at school and has no qualifications. Well, they're both high-risk for LTU, but the support they need us to deliver is totally different' (Former regional manager of ANPE, now retired).

'We have always said, the reactions of our unions have been, it's all very well with your algorithms and your profiling, but the real expertise is that of the employment adviser.' (National manager of a major public employment agency union).

Even though *Unedic* used to plebiscite algorithms advantages, profiling policy received media criticism from 2006 onwards. PES was nominated for the 'Big Brother Awards 2006' in the 'Orwell Novlang' category, for the 'computerised sorting of the unemployed'². Left-wing newspapers gave voice to criticisms levelled by advisers, who denounced the algorithm, calling it a 'wheel of fortune'. They also warned against the risks of privatisation, due to the growing power of *Unedic*:

'With unemployed profiling, the Assedics [*Unedic* agencies] are more and more becoming our prime contractors [...] Can you imagine? The public service is going to ask Medef (the leading employers' organisation) what it should do! I don't do it, I consider it part of my job, my prerogatives...'³.

'The unemployed are 'profiled' [...] Then, a computer programme – we call it 'the wheel of fortune' – directs them either to the classic ANPE service or to private operators'.

¹ This controversy developed even in the public arena, certain newspapers echoing it. See for example, the article by L. Robequain in *Les Echos* of 17 April 2007, "L'ANPE pointe les limites du profilage des chômeurs réalisé par les Assedic".

² See on this website: http://bigbrotherawards.eu.org/Asedic-et-ANPE.

³ L'Humanité, 15 June 2006, "Une grève contre 'l'abattage' à l'ANPE", article by T. Lemahieu.

⁴ Libération, 19 April 2007, 'La crainte d'une privatisation de l'ANPE grandit', article by S. Faure.

Moreover, the collective resistance organised by some unions did not focus on profiling. It denounced the contempt that profiling showed for the expertise of advisers. But above all, it questioned the future of the PES, the growing power of *Unedic* – and above all the alliance with private operators.

'For us, the trade unions, defending public service has become the major issue, as a result of the experimentation with profiling and private operators. We didn't want to have jobseekers selected – especially if it was to direct them to the [private operators], who are allowed to make a profit, while the ANPE keeps the others, the ones the private sector doesn't want' (Union leader who sat on the Board of Directors at both *Unedic* and ANPE).

Tensions between the two main unemployment institutions ran high. Within ANPE, national and regional managers, advisers and unionists resisted. For them, the most serious threats to PES stability were private operators and competition. At the turn of the century, these institutional issues worsened, leading to the removal of profiling from both the official PES agenda and public debate.

The temporary erasure of profiling and institutional reorganisation

Right from the very first years of its implementation, evaluations showed the poor reliability of *Unedic*'s statistical profiling method. This finding became public when the *Cour des Comptes* (Court of Auditors) described profiling methods as both 'deficient and unsuitable' (Seguin & Cornette 2006, p. 56). The quality of information held by *Unedic* and used for profiling purposes was strongly criticised. The data included neither behavioural (motivation, job search methods, etc.) nor situation (health, family, etc.) variables. Moreover, little information was available on unemployed people ineligible for benefit (45-55% of jobseekers, in the 2000s). The Ministry of Labour began to doubt the accuracy and reliability of profiling:

'We have had some developments. Not among politicians and cabinet members, it's in the services, on the technical aspects of profiling. We've had quite a few debates, with foreign experiences too. And doubts have been raised, more and more. [...] I think we tried to bring this up at sub-directorate level, saying: be careful, statistical modelling poses a lot of problems'. (Former member of the Directorate of Studies and Statistics at the Ministry of Labour).

Among advisers, profiling was considered useless: '...internally, we gradually saw that advisers were no longer relying on it much at all, less and less, compared to the beginning. In a few years it was over, done with' (Senior Manager, working at PES at the time). This view was reinforced in several official reports⁵, which pointed out that for advisers, understanding unemployed people's situations does not mean 'filing' them within an administrative nomenclature. In the same way, our interviews show that the advisers were able to step back from statistical profiling, in so doing, preserve their professional autonomy. Cross-referencing the data we collected, we conclude that statistical profiling failed to crystallise real opposition within ANPE, because its uses were in any case gradually being diluted.

At the same time, the PES was being challenged to rationalise, and this was perceived as a serious threat to the futures of both ANPE and the profession of adviser. At international level,

⁵ Inspection Générale des Finances, Étude comparative des effectifs des services publics de l'emploi en France, en Allemagne, au Royaume-Uni, Rapport n°2010-M-064-02, January 2011. Senate, Rapport d'information n°713 on behalf of the joint information mission on Pôle Emploi.

the OECD stressed that in terms of monitoring unemployed people, 'two separate administrations risk adopting divergent objectives'. Several official reports outlined reforms, leading to closer *Unedic*-ANPE integration and the establishment of a one-stop shop⁷. With the 2007 election of Nicolas Sarkozy as President of the Republic, the merger of these two main institutions was on the political agenda.

The introduction of both profiling and private operators had sharpened institutional competition and strengthened *Unedic*'s position. *Unedic* imposed its strategy, painting a picture of ANPE as inefficient and costly. When employment policy actors called into question the usefulness of profiling, the legitimacy *Unedic* had hitherto enjoyed was weakened. Furthermore, *Unedic* had wanted to pilot a comparative evaluation of the performance of the ANPE and private operators. But the Ministry of Labour entrusted it to an independent figure with recognised expertise⁸. The conclusions were clear: support of private operators led to poorer results than those of ANPE. ANPE thus emphasised the expertise of its advisers in personalising a service for unemployed people, and pleaded the superiority of caseworker-based profiling over statistical profiling.

The *Unedic* and ANPE positions were thus realigned, reversing the power balance of the foregoing period (Pillon & Vivès 2018). This had direct consequences for the dynamics of institutional recomposition in 2008. *Unedic* retained management of unemployment benefit funds – but lost the supervision of Assedic. All frontline staff (Assedic agents and ANPE advisers) joined *Pôle Emploi* (the new name for ANPE). A reorganisation of this kind is usually referred to as a merger, but in reality, ANPE swallowed Assedic whole – that is, along with all of *Unedic*'s operational services. At the political level, the merger was justified by simplification: a single counter, a single interlocutor, a single set of competences. This initially led to disorganisation and a deterioration in the quality of services, as reported by the last director of ANPE, who was also the first director of *Pôle Emploi*⁹.

Moreover, the merger was seen by the (liberal) government as an opportunity to reduce public employment. Assedic staff have always been 'private' employees. In contrast, ANPE employees had public law contracts, comparable to that of civil servants, and were recruited by competitive examination. The latter were given several options: giving up their public status in exchange for a pay rise, leaving their jobs with financial compensation, or keeping their public service status. The majority chose the first option. Since then, recruitment was also 'private' and included increasing recourse to temporary contracts. These changes increased *Pôle Emploi*'s power both to recruit advisers, and to organise their careers. This in turn gradually affected the spread of profiling tools, and statistical profiling began to fade from work practices, internal debates and collective struggles. However, once the merger's effects had been absorbed, profiling took root (under a different name) in the advisers' workplace.

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⁶ OECD, 2002. Perspectives de l'emploi de l'OCDE, Éditions de l'OCDE.

⁷ Mission Marimbert, Rapport au ministre des Affaires sociales, du Travail et de la Solidarité sur le rapprochement des services de l'emploi, January 2004. Commissariat général du Plan, Rapport de l'instance d'évaluation de la politique de l'emploi et recours à des opérateurs externes, February 2004.

⁸ State Secretariat for Employment, Les expérimentations d'accompagnement renforcé des demandeurs d'emploi conduites par l'Unedic et l'ANPE en 2007, Rapport de synthèse du Comité de pilotage de l'évaluation, October 2009.

⁹ See his book written during the merger period: Charpy, C., La tête de l'emploi, Paris, Tallandier, 2011.

¹⁰ Even blogs critical of the merger and its consequences fail to mention this issue of profiling. See 'La fusion pour les nuls' (active 2008-2013), which was an interactive, illustrated blog dedicated to the 50,000 Pôle Emploi employees, http://germinal.over-blog.fr/, or this one which took over from it (active between 2013 and 2015), Les 'irritants' de l'emploi, a blog by Aurore Boréale http://pull.over-blog.fr/.

The massive – yet discreet – dissemination of profiling tools

In the past decade, statistical profiling seems to completely disappeared. The term is never uttered by *Pôle Emploi* managers, who expressed surprise, and asked us for explanations, when our questions included this word. This suggests that the word profiling has been banished from institutional communication in a deliberate topdown strategy implemented by *Pôle Emploi* management, keen to avoid reawakening the internal tensions caused by the introduction of the previous profiling tool:

'As a result, the term 'profiling' was abandoned because it created so much tension: it created more problems than solutions. It's quite easy to understand that the way things are presented to advisers is central: they see it as an aid to decision-making or a replacement for their expertise' (Member of the *Pôle Emploi* management team).

Nowadays, the emphasis is on 'personalised diagnosis' (or even 'personalisation') of jobseekers. This vocabulary seems to be widely shared: 'Today, we talk about 'diagnosis' of the jobseeker, which means making sure the jobseeker is directed towards the right service, the one that's a good match for his or her situation.' (Adviser and trade union representative). These terms refer to the objectives of profiling methods without actually naming them, and *a fortiori* without any reference to statistical modelling. Profiling continues to lurk in the shadows, and data scientists working for *Pôle Emploi* compare profiling to personalisation:

'When you personalise things, you have to do targeting. Otherwise, there's no personalisation [...]. So we do targeting. And to use the term, we also do profiling, because when we say personalisation, it means we segment, categorise, and if we want to categorise but aren't familiar with the profile, we don't categorise anything' (Member of a data science team at *Pôle Emploi*).

A real profiling policy has however been amplified over the past decade as a way of managing the huge flow of jobseekers: tools for 'optimising interviews in order to meet the needs of the jobseeker through appropriate follow-up' have multiplied at PES agencies, as several advisers told us and as we have observed. The application known as 'personalised diagnosis' of the jobseeker is now the main medium for the 'diagnostic meeting' that is compulsory at the time of registration. There are several points of difference between the *Unedic* algorithm and that of new profiling tool. The data included are more numerous, they are updated in real time as advisers meet with the unemployed person, and are completed by qualitative variables that allow advisers to use their own expertise. These variables include information on living conditions, job search behaviour and deviations from occupational targets. The 'distance from employment measure' proposed by the algorithm is multidimensional: it covers career plans, job search, labour market situation and even 'peripheral obstacles'. Advisers get results for each of these dimensions, rather than a single score. The idea is that it both invites and supports interpretative work:

Albert, a former ANPE adviser, summarised the change in this way: 'Before, we had the raw score but without any explanation, without knowing which variables explained the score. Now we have information to help with interpretation'.

And a *Pôle Emploi* executive stated: 'One of the difficulties is getting the adviser to use the algorithm correctly [...] That's why we enrich what it says, adding the reasons why it thinks this or that. This is a real plus for the advisers, and we hope they will come on board more easily, too'.

Lastly, while the objective remains a question of prescribing one of three available types of support, the competitive burden has disappeared, since follow-up is always carried out by $P\hat{o}le$ Emploi advisers. Yet there is no generalised acceptance: advisers use the tools in divergent ways. Some simply ignore them, inputting data to the system afterwards; some use the tools to check their own diagnosis, and others delegate the bulk of diagnosis to them. We have identified some conditions that are currently favourable to the dissemination, acceptance and use of profiling tools in the French PES.

The first of these conditions relates to advisers' working conditions; their time constraints reinforce the place of statistical profiling, because it saves time. Moreover, it becomes difficult to ignore, when advisers have so many jobseekers to keep up with, by interview, email or phone. Officially, the average adviser's caseload is 350 jobseekers, but journalistic investigations have shown that it can be as high as 700. We also witnessed this in the course of our fieldwork among advisers).

A second condition is staff turnover at *Pôle Emploi*. In our fieldwork, we detected a link (to be tested via an extensive survey) between the use of profiling tools and adviser seniority. Those who began working pre-merger, have more than twenty years' experience and public employment status unanimously stressed that they had no need for statistical information in order to diagnose the unemployed. They did not rate the diagnostic tools highly, and some even dismissed them. More recently recruited advisers, however, those with 3 to 7 years' experience, considered diagnostic tools indispensable. And the most recently recruited adviser we interviewed (working on a fixed-term contract for 8 months) argued that the initial diagnostic interview is pointless, as all the information has already been completed online by the jobseekers themselves. Though there is no accessible data on advisers' profiles, we note that the oldest come from humanities backgrounds, while the youngest (in terms of experience) have mainly had tertiary training (management, accounting, etc.). This suggests that the significant changes in employment status and recruitment policy at *Pôle Emploi* in the decade following its creation have favoured the acceptability of statistical profiling within working practice.

The third favourable condition concerns the definition of the advisers' occupation and the training that supports it. Pre-merger, ANPE advisers underwent a compulsory six-month period of training in career guidance, the psychology of unemployed people, the sociology of unemployment, labour markets, etc. The training content has now been reduced and reoriented, and new recruits are now quickly assigned to a workstation, where they are monitored by a supervisor within their agency. They get nine days of training, which focuses on mastering the IT systems and no longer includes any human or social sciences. For a unionised adviser, these changes downgrade both the work itself, and the profession:

'Adapting mathematical and statistical tools to humanity is problematic [...] And that's why, in my opinion, they've started to downgrade the training of employment advisers. They are turning them into production and recording agents, which makes it possible to develop computer and technological developments and to direct diagnosis towards simplification and quantification.' (Adviser at ANPE, then *Pôle Emploi*).

¹³ Cour des Comptes, La gestion de Pôle Emploi, dix ans après sa création, Thematic report, July 2020.

¹¹ Investigation led by FranceInfo, *Comment les agents de Pôle Emploi suivent deux fois plus de chômeurs que les chiffres affichés par la direction*, 15th June 2019, <a href="https://www.francetvinfo.fr/economie/emploi/chomage/enquete-franceinfo-les-chiffres-secrets-de-agents-de-pole-emploi/gapanas-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-de-agents-de-pole-emploi/gapanas-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/gapanas-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-des-agents-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-de-pole-emploi/enquete-franceinfo-les-chiffres-secrets-de-pole-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emploi/enquete-franceinfo-les-chiffres-emplo-les-chiffres-emplo-les-chiffres-emplo-les-chi

The share of public sector contracted staff fell from 100% in 2008 to 7.8% in 2018.

With the use of Artifical Intelligence (AI) tools, a new stage is now being reached. By aggregating more and more varied information, these tools aim to further strengthen the decision support provided to advisers. Beyond that, their aim is to provide advice to jobseekers by leapfrogging advisers. Some experiments¹⁴ now involve jobseekers in collecting information through the *Pôle Emploi* web portal, via a multitude of applications. This makes it possible to establish direct machine-human contact; analysis of the data entered leads to a wide range of suggestions regarding jobseeking approaches to be favoured, relevant training courses, recommended employment channels, comments on CVs, etc. For jobseekers assessed by these applications as 'autonomous enough', contact with advisers may be remote-only, or delayed. Even if AI 'does not replace the employment adviser' as Intelligence Emploi project actors say, the adviser's role remains considerably reduced. Providing jobseekers with algorithm results is central to strategic reflections among members of *Pôle Emploi* management:

'We are thinking about this feedback, without taboos but with vigilance. For example, if the algorithm indicates that the jobseeker's expectations are overly optimistic (or pessimistic), what do we do? How can we communicate this information honestly, without dampening their enthusiasm? So, we are going to carry out experiments to find out whether it is motivational or disheartening, whether it encourages people to look for more or less. There are big ethical questions, but it is the way of the future.' (*Pôle Emploi* executive)

At *Pôle Emploi*, statistical profiling has become a strategy aimed at offering unemployed people better-targeted support – but also, increasingly, to provide a framework for caseworker-based profiling – and even to supplant it, in the case of the most autonomous jobseekers. Hiding discreetly behind the word 'diagnosis', this method has survived the merger. More recently, as part of incoming AI, it has become more invasive in institutional operations (where internal context is especially favourable) owing to the changes that increasingly affect the adviser population.

Discussion and conclusions

At the institutional and political level, the implementation of statistical profiling in France is by no means the direct consequence of the policy orientations promoted by international organisations. On the whole, it is also the product of inter-institutional struggles between *Unedic* and ANPE and a series of arbitrations by the Ministry of Labour and the government. Profiling was aggressively promoted as a means of achieving profound reform in the PES by addressing its supposedly poor efficiency and excessive cost. In this first phase, statistical profiling crystallised polemics and aggressive strategies – but the unexpected outcome was that the PES (ANPE) emerged stronger. This resulted in a merger, bringing together employment and financial support services for unemployed people. Statistical profiling lost its staunchest allies, and disappeared from internal debate in the field of employment policy. It seemed to serve as a 'divider' during a period in which the challenge was to build a one-stop-shop and get staff from both institutions working together within the new *Pôle Emploi*. Yet the idea that statistical profiling was eclipsed is a *trompe l'oeil*. We have shown that the main factors leading to the advent of profiling were the radical transformation of the PES in France and the transformation of the profiling tools themselves. And because the merger both rendered

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¹⁴ For example, the "Intelligence employ" project, for which *Pôle Emploi* received 20 million euros. https://www.emploi.org/le-blog-emploi.org/pole-emploi-une-intelligence-artificielle-pour-trouver-du-travail

profiling invisible and removed it from media and political debate¹⁵, the context was all the more favourable to profiling.

What can we learn from the history of profiling in the French PES, from the chaotic process of legitimising an initially controversial and rejected instrument? Three lessons can be highlighted. Firstly, we argue that the resistance of frontline professionals must be analysed over a sufficiently long period of time and not only at their workplace level. Secondly, we argue that the acceptability of profiling is strongly dependent from the transformations of its target: the 'advisers' category evolved due to the institutional and managerial transformations of the PES. Finally, we theorise a specific form of rationalisation, called professional rationalisation, in which the shaping of advisers de facto neutralises the autonomy left to them in their work.

First, we contribute to the debate around the issue of resistance in the sociology of policy instruments (Le Bourhis & Lascoumes 2014). Beyond activating unemployed people, algorithms have direct consequences for those working within the welfare state that include: modifications to their work (De Witte et al. 2019), redefinition of their decision-making conditions (Ranerup & Henriksen 2020) and threats to their expertise (Bovens & Zouridis 2002). The attitudes of frontline staff have therefore been put forward in explanation of the rejection (and subsequent abandonment) of profiling, whether as a result of head-on opposition or silent (though effective) circumvention of the tool (Körtner & Bonoli 2022; Dillard 2022). In relation to this line of research, we have shown that time has taken its toll, though not in the sense of any weakening of resistance through weariness (or gradual exhaustion). Indeed, we placed analysis of the policy instrument trajectory at the heart of the institutional, political and organisational challenges of steering the PES. Such an approach underlines few aspects often given inadequate consideration in the legitimisation of public action instruments analysis, such as organisational architectures and institutional dynamics, and changes to employment systems and professional skills. These two components amount to more than a mere national background context; indeed, they directly impact the place assigned to statistical profiling in the organisation of the PES, in the production of services for unemployed people and in the advisers occupational activities.

Secondly, our analysis also shows that the characteristics of advisers, which have changed over time as a result of PES management policies, directly influence the acceptability of profiling tools. It sheds new light on advisers, in relation to the more micro-sociological approaches centred on 'welfare state windows' and frontline staff (Senghaas et al. 2019; Kaufman 2020). Professionals change over time, even though (from an analytical point of view) they continue to be designated by the same category of 'PES advisers'. These far-reaching changes are partly a consequence of major institutional transformations: the status of 'public employee' (almost equivalent to that of a civil servant) is disappearing almost completely, training for the profession is evolving radically, and recruitment criteria are changing significantly. In short, the 'advisers' category has thus become more heterogeneous: the proportion of 'old' advisers most reluctant to use profiling is decreasing, while newcomers do not share their resentment. Today, those most prone to resistance against profiling are in the minority, and this in turn favours the development of profiling in frontline work. This role of seniority, identified in other studies (Assadi & Lundin 2018), is in fact an organisational or managerial production that manufactures acceptability at different levels. The way in which the adviser role has been restructured shows that it is possible, over time, for organisations to produce acceptability by stealth, discreetly undermining the source of potential resistance, and opens an avenue for future

 $^{^{15}}$ The 'profiling issue' was set aside in favour of other issues, perceived as being more central.

research. The strength of profiling is therefore that it has succeeded in establishing itself discreetly – by 'creating', as it were, its own accomplices.

Lastly, our analysis of the stealth introduction of profiling leads to theorising a specific form of rationalisation in public services often focuses on its direct (though varied) consequences for frontline staff, who bring their expertise and discretion to bear on interactions with users or clients (Bezes et al. 2012). The recurring pattern is that professionals defend their autonomy when it is threatened by bureaucratic or formal rationalisation (Hall 1968; Bezes et al. 2021). This rationalisation seeks to the standardisation of professional work and its reduction to organisational routines (Nelson & Winter 1982), so that typical cases can be rapidly identified and the correlative application of differentiated treatments mechanically associated with these cases. This is precisely the objective of profiling algorithms, yet it can only be achieved in the absence of resistance. Our fieldwork shows that intermediate paths exist: rejection or acceptance are not the only outcomes possible. At the end of a tortuous and chaotic path, statistical profiling is now widespread within the French PES. Since the algorithm is now installed on the workstation of every adviser, it can even be described as invasive. And the very discretion of the instrument, inserted almost imperceptibly into a broader digitalisation policy, makes this invasion possible. Yet profiling is also flexible, because the algorithm produces a multidimensional categorisation of the unemployed person that leaves room for interpretation by advisers and allows for the adaptation of prescriptions. In this sense, it is a tool for rationalising the work of advisers, a set of routines that processes information to produce a diagnosis of each case and suggest appropriate support.

However, this rationalisation appears weak as it removes neither the professional nature of this work nor that of the services provided: advisers can adjust these routines - and more importantly, they can ignore them. And yet this rationalisation is also powerful when it meets profiles of advisers who are prepared to use profiling tools and perceive them as resources for good work. This is the tension that distinguishes this rationalisation from bureaucratic rationalisation, and we suggest that it be referred to as 'professional rationalisation'. Our choice of this oxymoronic coinage is intended to articulate two salient features of this rationalisation: since advisers are able to circumvent it and do without it in their work, it appears limited, yet it is invasive because it structures the adviser population via recruitment and training policies before new employees even start working. The combination of these two features is decisive in producing the acceptability of an instrument that has, both in a broader technical and digital programme, and in an encompassing organisational and managerial policy, been dissolved. While it does leave advisers a great deal of room for manoeuvre, these advisers, at least some of them, are being groomed to incorporate the tools into their professional practice. In this sense, professional rationalisation is much more than a softened or moderated form of bureaucratic rationalisation. On the contrary, since it transforms the frontline advisers who are its target before the instrument of rationalisation is applied, it appears powerful – perhaps even irreversible.

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