



**THE VACCINE
CONFIDENCE
PROJECT**

Insights into HPV vaccine confidence in France

2 December 2021

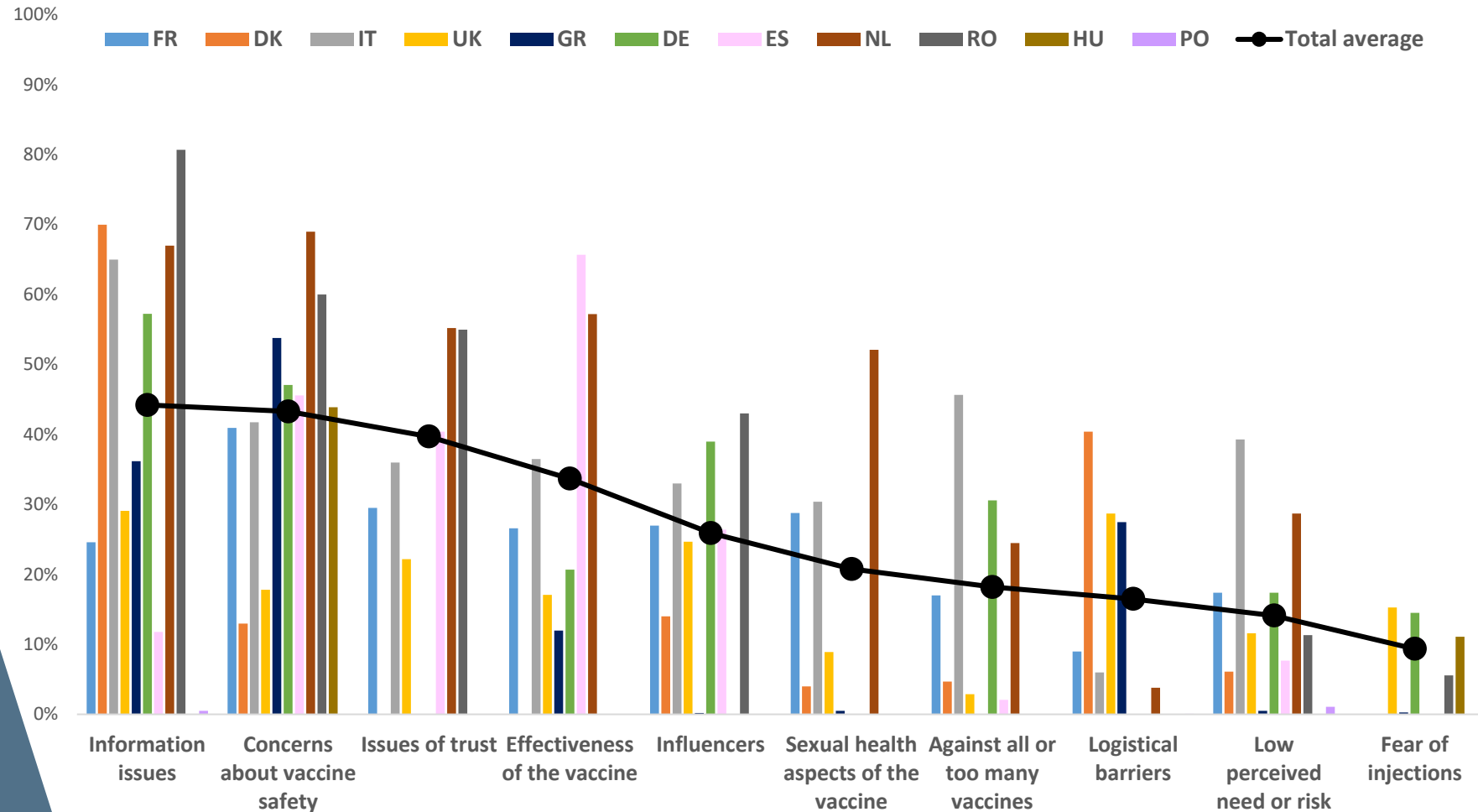
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The Vaccine Confidence Project™

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HPV vaccine confidence in Europe

Despite HPV infection being one of the most common sexually transmitted infections in Europe, vaccination against HPV remains highly controversial in many countries, including France



Karafillakis E, et al. (2019) HPV vaccination in a context of public mistrust and uncertainty: a systematic literature review of determinants of HPV vaccine hesitancy in Europe, *Human Vaccines & Immunotherapeutics*, 15:7-8, 1615-1627

Exploring HPV vaccination decision-making among mothers and adolescent girls in France

Analysis:

Codebook approach to thematic analysis



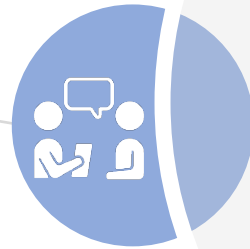
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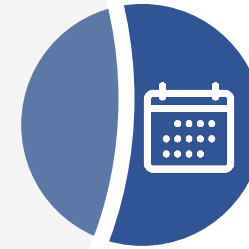
Qualitative data:

Adolescent girls: 24 in-depth interviews; 2 focus groups (5-7 girls in each)
Mothers: 21 in-depth interviews



Data collection timeline:

October 2018 – March 2019



Qualitative research methodology



Recruitment:

Participants purposively selected to include vaccinated and unvaccinated girls (8 vaccinated girls identified)
Recruitment: schools & research panels

Setting and participants:

Setting: Paris, France

Participants: Adolescent girls aged 15-16 and their mothers



Maturity and vaccination decision-making



The role of mothers

Mothers: responsible for household health decisions, teaching children healthy behaviours. Children commonly assume the behaviours, beliefs and values of their mothers.



Impact of adolescence

HPV vaccination is given at an age corresponding to major life changes and school transitions in France, with adolescents seeking greater independence from parents while experiencing closer relations with peers.



Parental consent

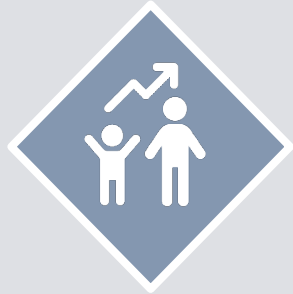
In France, parental consent is required and involvement is limited to discussion with parents, but increasing adolescent engagement could be a way of boosting vaccine uptake



Maturity

Adolescents' capacity to engage in decision-making is influenced by their maturity. Maturity is a continuum, defined in relation to *responsibility*, *temperance* and *perspective*

Maturity and HPV vaccination decision-making¹



The role of maturity. Agreement that maturity influences girls' role in decision making. Girls progressed towards maturity at different speeds: some expressed childlike traits (e.g. impulsiveness) and others described more rational, reflective decision-making

"My mentality changed a lot (...) I ask myself a lot more questions. Before, it was 'I have to do it, so I do it'" (A3)



Passive role. Most girls followed their parents' decisions. However, they also expressed a desire for information and engagement, and highlighted feeling excluded by mothers and doctors

"He said 'on this day, I would like you to come back to get a vaccine', but then he explained everything to my mum" (FG2)



Volatility and emotions. Although girls described volatility in decision-making, they seemed less influenced by emotions than mothers who expressed described the vaccine as controversial. Understanding the influence of this environment on adolescents is key

"Opinions change all the time (...): you ask me all these questions, I answer them, but I know (...) that it's probably going to change. Maybe one day, I will finally have a response" (A3)

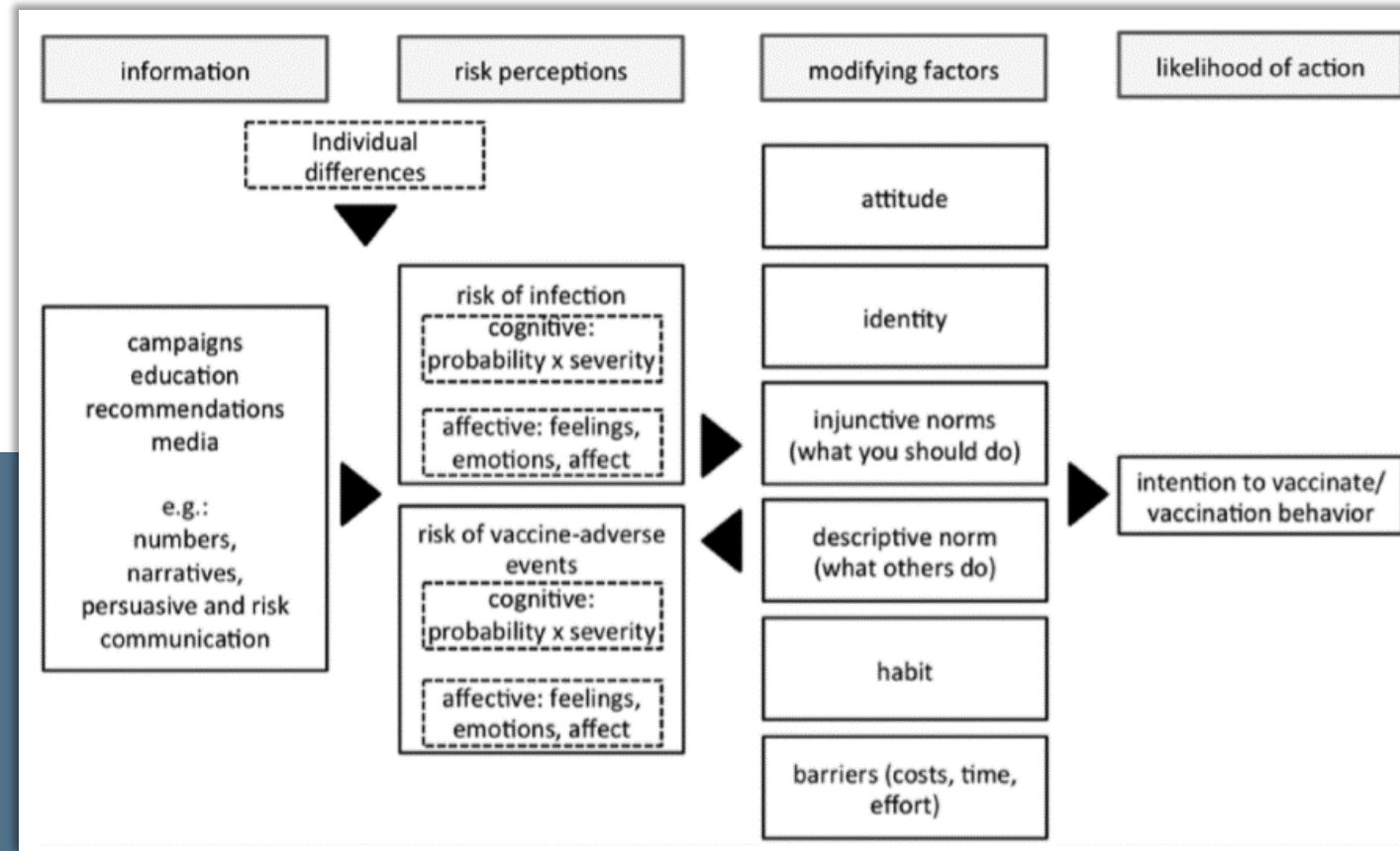
The influence of risk-benefit perceptions on vaccination

Vaccine intentions: consequence of cognitive and affective perceptions of risks and benefits of vaccines

Perceptions influenced by information, beliefs and experiences (heuristics, trust, emotions, literacy), and context

Adolescents perceive risks differently:

- they overestimate risks because of peer influences and emotional reactions
- they are higher risk-takers
- they feel less vulnerable as individuals
- in decision-making, they place more weight on benefits of actions than perceived risks

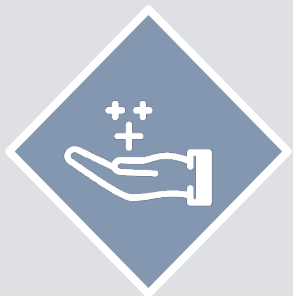


Perceptions of HPV vaccination risks and benefits²



Individuality of perceptions. Adolescents reported that both perceptions and actual risks and benefits vary from one individual to another: everyone has different risk of contracting the disease, places different values on side-effects, and reacts differently to viruses/infections and vaccines (physiological)

“I don’t think it can work for everyone (...) we don’t have the same bodies, we don’t react the same way” (A11)



Vaccine benefits. While girls reported positive and beneficial views and emotions towards vaccination, highlighting the importance of preventing cancer, mothers were less enthusiastic, even when they experienced the disease personally.

“No, at no point did I say to myself that I was going to vaccinate her because this happened to me. No, I was really disgusted to have it, but...” (M11)



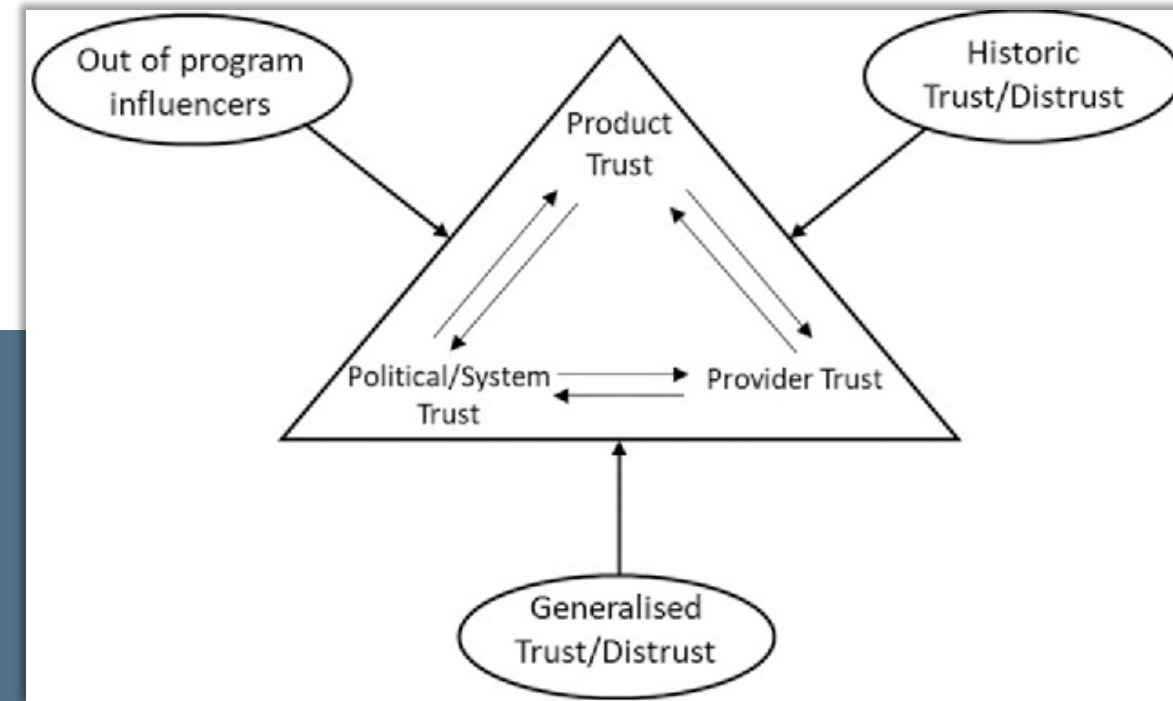
Vaccine safety. Mothers reported a normalised view that vaccines are unsafe, focusing on controversial side effects. Contrastingly, girls discussed short term side-effects (pain, fever) and administration or storage issues.

“[The vaccine] can be done incorrectly, and then, well it can become infected (...) Yes, he could do it in the wrong place or if the needle is not cleaned properly, or things like that” (A14)

Trust and vaccination decision-making

Trust expressed towards **products** (i.e. vaccines), **providers** (i.e. health professionals) and **policy-makers** (i.e. health systems, governments, scientists) can constitute **levers of vaccine acceptance**

- Trust in information on vaccination depends on **those who produce and share it**
- Parents have traditionally placed their **trust in proximal sources** such as doctors rather than more distant ones such as health authorities.
- Individuals increasingly **questioning trustworthiness of scientific experts** and information, turning to **alternative sources of information** (i.e. peers, internet) and potentially **exposing themselves to information discouraging vaccination**



The role of trust in HPV vaccination decision making³



Trust in the vaccine. Due to public criticism and conflicting advice from HCPs, the vaccine was mistrusted and seen as controversial, especially among mothers:

“There is a real debate among doctors (...) if all scientists had said, this vaccine is great, it works all the time, I think doctors would have said ok” (A10)



Trust in providers. Girls and mothers expressed strong trust in doctors, although it did not always increase vaccine acceptance due to lack of recommendations. Girls prioritised trust in their own mothers, often their only source of information:

“If the doctor recommended it? I would still say no, because my mum decided, I trust her” (A7)



Trust in health authorities. Girls expressed strong trust in health authorities but the perceived mismanagement of previous health events tainted mothers' trust

“We had the blood contamination scandal, it was a catastrophe (...) And they knew the blood was contaminated (...) If it happened once, it can happen a second time” (M9)



Trust in information. Mothers & girls acknowledged influences by others around them and by information, often negative, from the internet. Girls also expressed mistrust about information in general, explaining that any information can be manipulated

“It really impacted me, hearing about negative consequences of this vaccine on the radio” (M1V)

Key conclusions and recommendations

01

The role of maturity. Most adolescent girls are currently excluded from HPV vaccination decision-making, yet they can have the maturity to make informed decisions. Individualised approaches to engage adolescents in decision-making are needed, for example through strengthening discussions and information around HPV vaccination with parents and doctors.

02

Risk and benefit perceptions. Adolescent girls and mothers perceive the risks and benefits of HPV vaccination differently. There is a risk of mothers transmitting their concerns and hesitancy to adolescents, which should be mitigated by ensuring adolescents are informed through other sources such as schools; communication to address mothers' concerns is also required

03

Trust. Low confidence in HPV vaccination in France can be explained by broader trust issues, which will require long-term efforts to address. Mothers' trust in doctors can lead to increased vaccine confidence if doctors more commonly recommend vaccination

Key findings references

1. Karafillakis E, Peretti-Watel P, Verger P, Chantler T, Larson HJ. The role of maturity in adolescent decision-making around HPV vaccination in France. *Vaccine*. 2021 Sep 24;39(40):5741-7.
2. [UNPUBLISHED, submitted] Karafillakis E, Peretti-Watel P, Verger P, Chantler T, Larson HJ. “We don’t have the same bodies; we don’t react the same way”: mothers and adolescent girls’ perceptions of the risks and benefits of HPV vaccination in France
3. [UNPUBLISHED, submitted] Karafillakis E, Peretti-Watel P, Verger P, Chantler T, Larson HJ. ‘I trust them because my mum trusts them’: exploring the role of trust in HPV vaccination decision-making among adolescent girls and their mothers in France