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Young People and Covid-19 II: Evolution 2020 to 2021, Vaccination Willingness, and Impact of the Pandemic

Preliminary Results of a
Representative Survey of
Adolescents and Young Adults in
Luxembourg

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LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Éducation nationale,
de l'Enfance et de la Jeunesse

The '**YAC – Young People and COVID-19: Social, Economic, and Health Consequences of Infection Prevention and Control Measures among Young People in Luxembourg**' project was funded by the University of Luxembourg, the Ministry of Education, Children and Youth, and the Luxembourg National Research Fund, Luxembourg (grant 14720458 - YAC). YAC is part of the YAC+ umbrella project, which is also conducting a qualitative study on COVID-19 alongside the YAC. The YAC+ umbrella project was funded by the University of Luxembourg and the Ministry of Education, Children and Youth.

The authors would like to sincerely thank the following individuals and institutions for their valuable comments and support:

Nathalie Keipes, Josepha Nell, Conny Roob and Laurent Bauler from the Direction générale du Secteur de la Jeunesse and Elisa Mazzucato and Senad Karavdic from SCRIPT (Service de Coordination de la Recherche et de l'Innovation Pédagogiques et Technologiques) at the Ministry of Education, Children and Youth;

Nico Majerus, Pierre Trausch, Pierrette Weisgerber and Walter Fronville from the Government IT Centre; Bechara Ziadé and Katharina Pucher from the Department of Epidemiology and Statistics at the Ministry of Health;

Hamid Bulut, Carolina Catunda, Simone Charles, Andreas Heinen, Andreas Heinz, Moritz Höpner, Christiane Meyers, Alessandro Procopio, Anette Schumacher, Maria E. Sozio, and Helmut Willems from the Centre for Childhood and Youth Research at the University of Luxembourg and their student assistant Marielle Baumgarten;

Jörn Marx and his team from T&I Portfolios GmbH;

All of the adolescents and young adults who tested the questionnaire or took part in the survey, and the parents who helped adolescents take part.

The analyses and interpretations presented in this report are those of the authors and do not necessarily represent the views of the people who have commented or of the institutions that have provided financial or other support.

Suggested citation:

Schomaker, Lea; Residori, Caroline; Fernandez-Urbano, Roger; Samuel, Robin (2021): Young People and Covid-19 II: Evolution 2020 to 2021, Vaccination Willingness, and Impact of the Pandemic. Preliminary Results of a Representative Survey of Adolescents and Young Adults in Luxembourg. University of Luxembourg: Esch-sur-Alzette.

DOI: 10.17605/OSF.IO/4RVHG

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Introduction and approach

Since the spring of 2020, Luxembourg has experienced the scale of a global pandemic triggered by the SARS-CoV-2 virus. The COVID-19 pandemic has followed a pattern of waves, affected by various factors such as number of contacts, virus variants, preventative measures and vaccinations. Despite brief, temporary easing of the situation and the development of various vaccines, the emergence of numerous virus variants – in particular the delta variant and recently the omicron variant (Katella, 2021; World Health Organization, 2021b, 2021b) – means that the situation remains serious (Eurofound, 2021). To contain the COVID-19 pandemic and avoid overloading the healthcare system, since the spring of 2020 various measures have repeatedly been implemented or extended, such as contact restrictions, restrictions on going out, and hygiene regulations. These measures particularly affect the everyday lives of young people. Social interaction with friends, educational and learning experiences, and the opportunity to try new things are key to young people's development. Last year's report on Young People and COVID-19¹ showed that closures and limited access to institutions had, what was in some cases, a significant impact on the well-being and behaviour of young people, as well as their learning and professional development (Residori et al., 2020). This report is a continuation of that previous report, drawing on preliminary data from the YAC 2021 survey² (Residori et al., 2021) and analysing young people's

perception of the pandemic, the measures implemented, and COVID-19 vaccinations. It is important that the situation of young people and their reaction to the COVID-19 pandemic is considered and explored not just from a short-term perspective but also with a medium and long-term viewpoint, as some consequences of the pandemic may take a long time to emerge.

The University of Luxembourg's YAC study seeks

YAC survey – preliminary data

Respondents: Luxembourg inhabitants (as per RNPP)

Age of respondents: 12-29 years

Number of respondents: 2,986

Survey period: 9 Aug to 22 Sep 2021

Contacted: by letter

Survey form: online questionnaire

to establish a comprehensive picture of young people aged 12 to 29 in Luxembourg during the pandemic across multiple points of measurement (2020, 2021, 2024). The people surveyed were selected via a stratified random sample from the National Registry of Natural Persons (RNPP). The selected individuals were sent a letter inviting them to take part in an online survey. The survey began on 9 August 2021 and ended on 19 October 2021. To make the results available as quickly as possible, a preliminary data set was prepared for the 2,986 participants who completed the survey in full by 22 September 2021³. The participants were weighted by gender, age and residential district to ensure that all 12 to 29 year olds living in Luxembourg would be represented.

should always be taken into account when interpreting the results, as the pandemic situation during the summers of 2020 and 2021 was comparatively calm (World Health Organization, 2021a), and in the summer of 2021, increasing numbers of people had been able to receive a COVID-19 vaccination.

¹ Available at <https://www.jugend-in-luxemburg.lu/yac-plus/>

² Available at <https://www.jugend-in-luxemburg.lu/yac-plus/>

³ The YAC 2021 survey was thus completed at a similar time to the YAC 2020 survey Residori et al. (2020). This period

This report uses this preliminary data to describe how young people in Luxembourg⁴ are coping with this situation in general, how concerned they are about COVID-19, and also how young people in Luxembourg perceive measures to combat the COVID-19 pandemic. Furthermore, this year's edition sets out the attitudes of young people in Luxembourg towards COVID-19 vaccinations and the impact of the COVID-19 pandemic and the associated measures on various areas of their lives, e.g. mental health, living together with family, or performance in school work.

Where possible, the results have been compared with the findings from the previous year's report to highlight any changes⁵. In addition, correlations with gender, age, migrant background, and socio-economic status (SES) have been sought for the aspects listed above. This will highlight disparities in handling and coping with the COVID-19 pandemic. As this analysis has been performed on preliminary data, only clear, highly statistically significant differences are reported.⁶ Additional tables can be viewed in a key table report that is also being published (Residori et al., 2021). The final data will be analysed in depth at a later date to examine more complex connections.

The aim of this report is to describe the preliminary data basis and concisely present some of the key findings. However, to make the results easier for readers to interpret, some reference studies tackling similar issues were identified. In order to classify these results, for example in comparison to the population of Luxembourg as a whole or the

situation of young people in other countries, we refer to national or international studies.

Coping with the current situation and concern about COVID-19

As in the previous year, this year's YAC 2021 survey asked young people in Luxembourg about how they are coping with the COVID-19 pandemic and also examined how concerned they are due to the pandemic situation. On average, respondents state they are able to cope with the pandemic and associated measures similarly well as in the summer of 2020 (Residori et al., 2020; Schoemaker et al., 2020). The average for 2021 was 6.6 (on a scale of 0 'not well' to 10 'very well'), so slightly below the 6.8 from 2020. This is not a statistically significant change. This means that a year on, with comparatively low case numbers and measures, young people are not handling the pandemic situation any better or worse.

Young people cope with the pandemic in very different ways; statistically significant differences by gender, migration status and socioeconomic status (SES) can be identified – as was the case in 2020 – with similar trends: for example, female respondents (average: 6.4) reported coping with the pandemic somewhat less well than male respondents (average: 6.8) (compared with 2020: female 6.5; male 7.1). The same applies for migration status and SES⁷. On average, respondents from a migrant background and respondents with a low SES reported coping with the pandemic less well

⁴ When this report uses the term 'young people' it generally refers to the surveyed group of 12 to 29 year olds. If specific age groups are being referred to, this will be clearly indicated.

⁵ The results of the two surveys can be compared, as the measures to combat the COVID-19 pandemic that were being implemented during the two different survey periods were very

similar, and classified as somewhat less severe by the WHO in the 'Public health and social measures severity index' World Health Organization (2021a).

⁶ This means that only results with a p-value of maximum 0.001 will be reported, unless stated otherwise.

⁷ See Residori et al. (2021).

than respondents without a migration background and respondents with a high SES.

The YAC 2021 data (Residori et al., 2021) also shows a correlation with respondents' age. When comparing all the different age groups, it becomes evident that younger respondents reported coping with the pandemic somewhat better than older respondents. These results were not statistically significant in 2020. However, it is important to note that the life situations of young people usually differ greatly across different age groups.

In 2021, around two thirds of young people aged 12 to 29 in Luxembourg are very worried or quite worried about COVID-19 and the associated changes (see figure 1). This is lower than in the summer of 2020, when around half of respondents (54%) reported feeling worried. The proportion of respondents reporting feeling not or not very worried also rose, from 23% in 2020 to 30% in 2021. There has therefore been a general shift towards lower levels of concern.

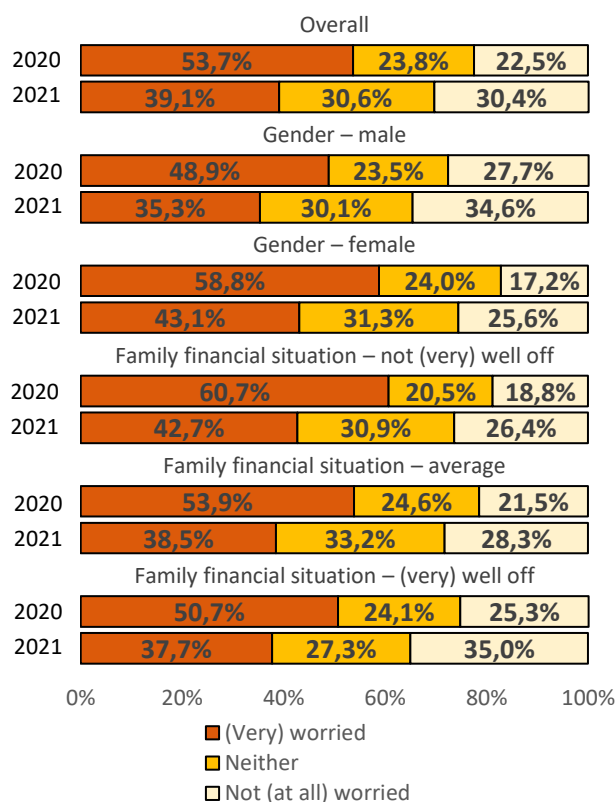
The trend towards a lower level of concern now compared to 2020 appears in respondents of both genders, all age groups, from or not from a migrant background, and with different socio-economic statuses.

Although the level of concern has fallen overall, there are statistically significant differences by gender, age and SES in 2021, as there were in 2020. The number of female respondents reporting feeling very worried or quite worried is 43%. For male respondents this proportion is 35% (see figure 1).

Young adults are more concerned about the pandemic than adolescents. The proportion of 12 to 14 year olds who state that they are very worried

or quite worried is around 28% (2020: 46%). For 27 to 29 year olds, this proportion is 44% (2020: 61%), making them the most concerned of the groups surveyed, as they were in the previous year (see Residori et al., 2021).

Figure 1: Concern about COVID-19 in 2020 and 2021, total, by gender and SES



Respondents with the highest SES display the smallest proportion of those reporting being very worried or quite worried by the COVID-19 pandemic, at 38%. Conversely, respondents with a low SES report the highest proportion at 43% (see figure 1).

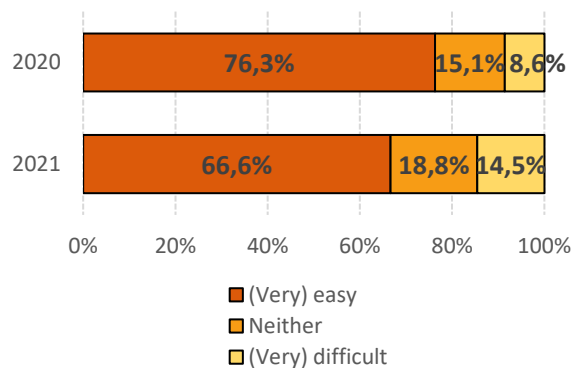
Adhering to measures

During the second summer of the pandemic, 66.6% of young people in Luxembourg report that they find it (very) easy to adhere to measures to combat the pandemic and protect against COVID-

19⁸. However, compared with 2020, a proportion of young people has increasing issues with adhering to measures.

Figure 2 demonstrates that the percentage of respondents who find adhering to measures to be easy or very easy fell by around 10 percentage points compared with the previous year. At the same time, the proportion of people who find it (very) difficult rose by around 6 percentage points.

Figure 2: Easiness of adhering to measures to combat COVID-19



Although there are no statistically significant differences by gender, we have found differences by age. Consequently, in a comparison of all age groups, in the summer of 2021 younger respondents were more likely to find it very easy to adhere to the measures compared to the previous year. However, compared with 2020, significantly more 21 to 29 year olds experience difficulties with adhering to COVID-19 measures.

As was the case in 2020 (Schomaker et al., 2020), 2021 also showed that young people with a low socioeconomic status (SES) were more

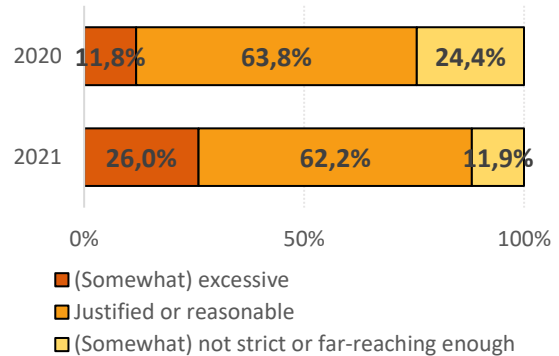
⁸ It should be noted here that at the time of the survey in August and September 2021, measures to combat the pandemic were increasingly being eased, vaccinations were available to all the age groups surveyed, and the overall level of infection was low (World Health Organization, 2021a).

likely to report finding it (very) difficult to adhere to measures.

Perception of measures

In the YAC 2021 survey, around a tenth (11.9%) of respondents aged 16 to 29⁹ report that they felt measures were (somewhat) not strict or far-reaching enough. In 2020 this proportion was still around a quarter of respondents (24.4%), thus demonstrating a statistically significant decrease (see figure 3).

Figure 3: Perception of measures to combat COVID-19 in 2020 and 2021⁹



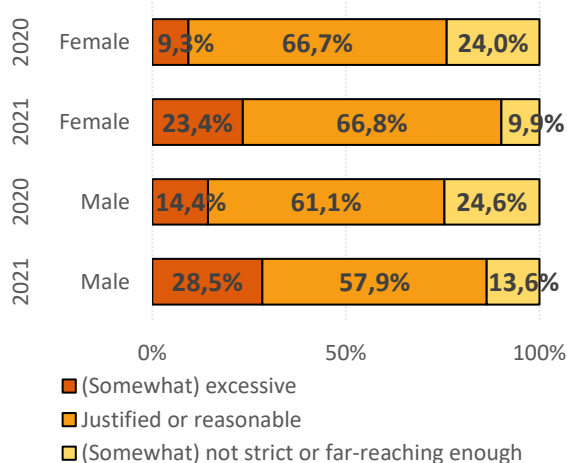
At the same time, the proportion of young people in Luxembourg who state that they felt the measures implemented to be (somewhat) excessive at the time of the survey increased from around 12% in 2020 to around 26% in 2021 (see figure 3). However, the majority of young adults (62.2%) states that they considered the measures justified or reasonable. This proportion matches the proportion from the YAC 2020 survey (Schomaker et al., 2020).

A youth survey from Rhineland-Palatinate in Germany conducted in the spring of 2021 shows that

⁹ For this data to be comparable with the YAC 2020 survey, only respondents aged 16 to 29 is taken into account here. However, the YAC 2021 survey posed this question to respondents aged 12 to 29. See also: Residori et al. (2021).

only around 27% of respondents aged 14 to 27 considered pandemic-related measures to be appropriate. Around 35% stated that they did not consider the measures far-reaching enough, whilst 28% stated that the measures went too far and 10% did not give an answer (Dittmann et al., 2021). At first glance, this contrasts with the reports from this data. However, it should be noted that the YAC 2020 data was collected around four months later during the summer of 2021, and also covered a wider age group. At this point in time, the pandemic situation overall had improved, vaccination levels had risen, and restrictions had been eased.

Figure 4: Perception of measures to combat COVID-19 in 2020 and 2021, by gender⁹



As in 2020, male and female respondents view COVID-19 measures differently (see figure 4). At 28.5%, male respondents are more likely to consider measures to be (somewhat) excessive than female respondents at 23.4%. Drawing on this year's preliminary results, thus far no statistically significant differences have been identified by gender, migration background or socioeconomic status (SES) in how measures to combat COVID-19 are perceived.

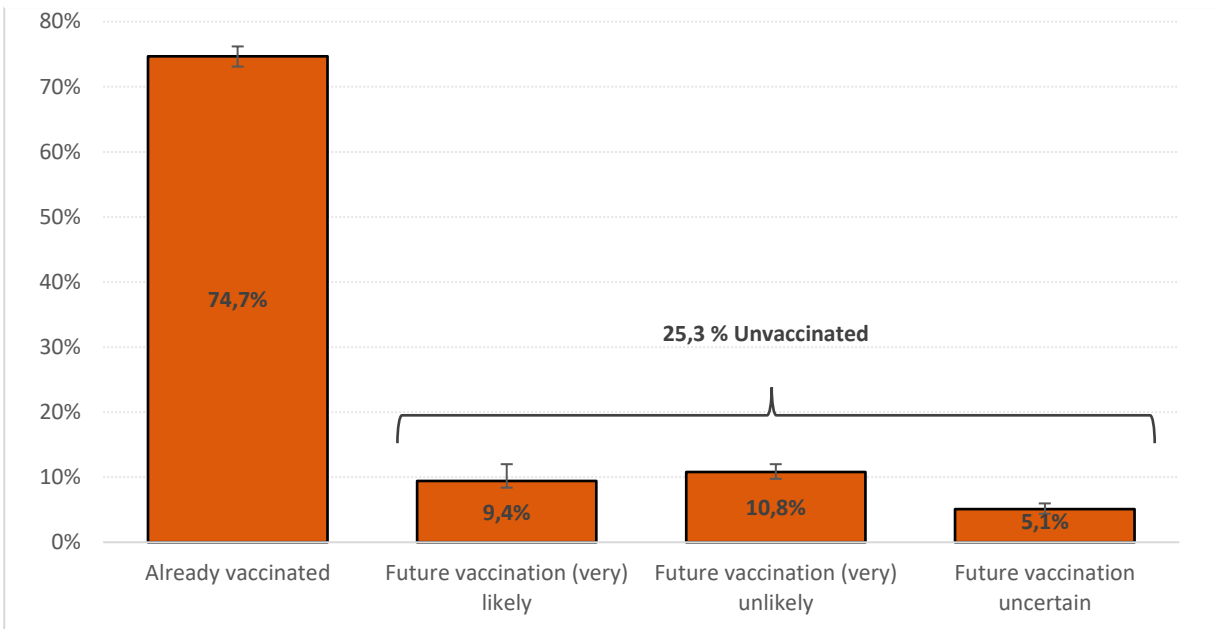
Vaccination status and vaccination willingness

A series of vaccines has now been recognised by governments, international institutions and the scientific world as offering effective protection against a severe course of COVID-19 (World Health Organization, 2021c). In addition, getting as many of the population as possible vaccinated against COVID-19 is a major factor in continuing to combat the pandemic and keeping healthcare systems functioning as legal measures are eased and new variants of the COVID virus emerge (Kattella, 2021; World Health Organization, 2021b, 2021b).

Whilst it was initially only older age groups that were able to receive the COVID-19 vaccine, from May 2021 onwards people aged 18 to 54 were able to be vaccinated, followed by 12 to 17 year olds from July 2021. In Luxembourg, these age groups were invited by the health department to be vaccinated against COVID-19 free of charge at local vaccination centres, in an order based on medical urgency and in decreasing order of age (Le Gouvernement du Grand-Duché de Luxembourg, 2021; Le Gouvernement du Grand-Duché de Luxembourg - Ministère de la Santé, 2021).

The section below discusses the extent to which young people have taken up the opportunity to receive a COVID-19 vaccination and examines the vaccination willingness of young people who have not yet been vaccinated. It also investigates the reasons why young people have chosen to receive or not receive a vaccination.

Figure 5: Vaccination status and willingness to be vaccinated among 12-29 year olds



As of mid-September 2021, the proportion of the population in Luxembourg that was fully vaccinated was 26.5% for those aged 10 to 14, 54.7% for those aged 15 to 17 and 57.3% for those aged 18 to 24, according to the European Centre for Disease Prevention and Control (European Centre for Disease Prevention and Control, 2021). Among respondents to the YAC 2021 study, the proportion of young people reporting being vaccinated between August and September 2021 was significantly higher at 74.7% for 12 to 29 year olds (see figure 5 or Residori et al., 2021). This could be due to a bias, as young people who take part in a scientific study are probably more likely to be willing to be vaccinated.

The proportion of respondents reporting being vaccinated rises with age according to both the European Centre for Disease Prevention and Control (2021) and our study. For example, a little

under three fifths (56.3%) of adolescents aged 12 to 14 and two thirds (67.2%) of adolescents aged 15 to 17 state that they have been vaccinated in the YAC 2021 survey. Among 27 to 29 year olds this was four fifths (80.9%) (Residori et al., 2021). This age-based discrepancy will most likely decrease as time passes, as it is partly due to younger generations gaining access to the vaccine at a later point.¹⁰ In addition, unvaccinated 12 to 17 year olds reported greater vaccination willingness than unvaccinated 18 to 29 year olds (see below or Residori et al. (2021)).

No statistically significant differences were identified between the genders in terms of vaccination status. However, it is evident that there is a higher proportion of unvaccinated individuals among respondents with a low socioeconomic status (SES) (32.6% and 32.0% respectively¹¹) than among re-

¹⁰ The first invitations to receive a coronavirus vaccine were sent out to young people aged 12 to 17 in the week beginning 28 June 2021, starting with the oldest. Older age groups already had access to COVID-19 vaccinations before (Le Gouvernement du Grand-Duché de Luxembourg (2021).

¹¹ This relates to the personal financial situation and the family's financial situation. See also: Residori et al. (2021).

spondents with a high SES (16.8% and 24.1% respectively). Young people with a migration background (first generation 28.5%, second generation 29,7 %) also had a higher proportion of unvaccinated individuals than young people without a migration background (16.2%).

Figure 5 shows that in August and September 2021, around 9% of 12 to 29 year olds reported that they were not yet vaccinated but were (very) likely to get vaccinated against COVID-19 in the future. A similar proportion of young people reported that they were unvaccinated and were (very) unlikely to get vaccinated. One in twenty respondents stated that they were not vaccinated and had not yet decided whether to get vaccinated in the future.

In terms of the willingness of unvaccinated individuals to receive a vaccination, there are marginally statistically significant¹² differences in terms of age, gender and migration background.

Unvaccinated respondents under the age of 18 are more likely to accept a vaccination than unvaccinated individuals aged 18 to 29. Whilst around 45% of unvaccinated 12 to 17 year olds report being willing to have a vaccination, only around a third of 21 to 29 year olds intend to get vaccinated. One possible explanation for these age differences could be that, due to the later availability of vaccinations for 12 to 17 year olds, the potential of their willingness to be vaccinated at the time of the survey was not yet as fully exhausted as that of 18 to 29 year olds.

¹² It should be noted here that due to low case numbers, the significance level for vaccination willingness among unvaccinated individuals has been set as less strict (p-value ≤ 0.05) than for the rest of the report (p-value ≤ 0.001).

Viewed by gender¹³, there are statistically significant differences with regards to being either very likely or very unlikely to agree to a vaccination in the future (see Residori et al., 2021).

Unvaccinated males were more likely than unvaccinated females to report that they were very likely to get vaccinated. On the other hand, unvaccinated females were more likely to state that they were very unlikely to get vaccinated or were unsure.

These differences by gender were also confirmed for adolescents in Switzerland (Leos-Toro et al., 2021) and young adults in Germany, France and Luxembourg (d'Ambrosio et al., 2021). People from with a migration background¹⁴ (first generation 28.8%, second generation 20.3%) were more likely to say that they were very likely to be vaccinated than people without a migration background (10.7%).

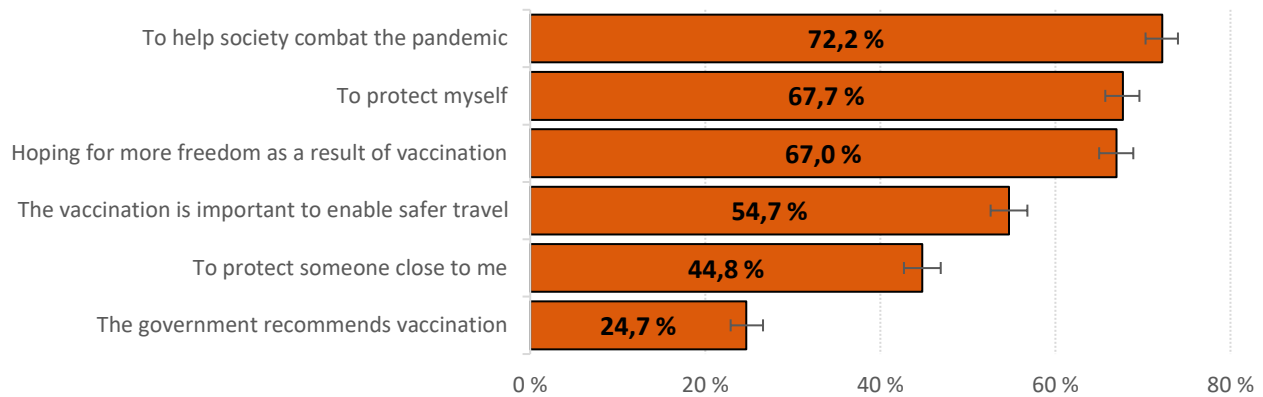
Reasons for (lack of) vaccination willingness

As well as vaccination status and vaccination willingness, this section examines the reasons why young people choose to accept or reject a vaccination. The primary reasons given for already having had a COVID-19 vaccination related to the individual themselves, such as self-protection, hoping for more freedom, and safer travel. However, reasons were also frequently given that related to others, such as “to help society combat

¹³ P-value = 0.009

¹⁴ P-value = 0.011

Figure 6: Reasons for already having had a COVID-19 vaccination given by more than 20% of respondents



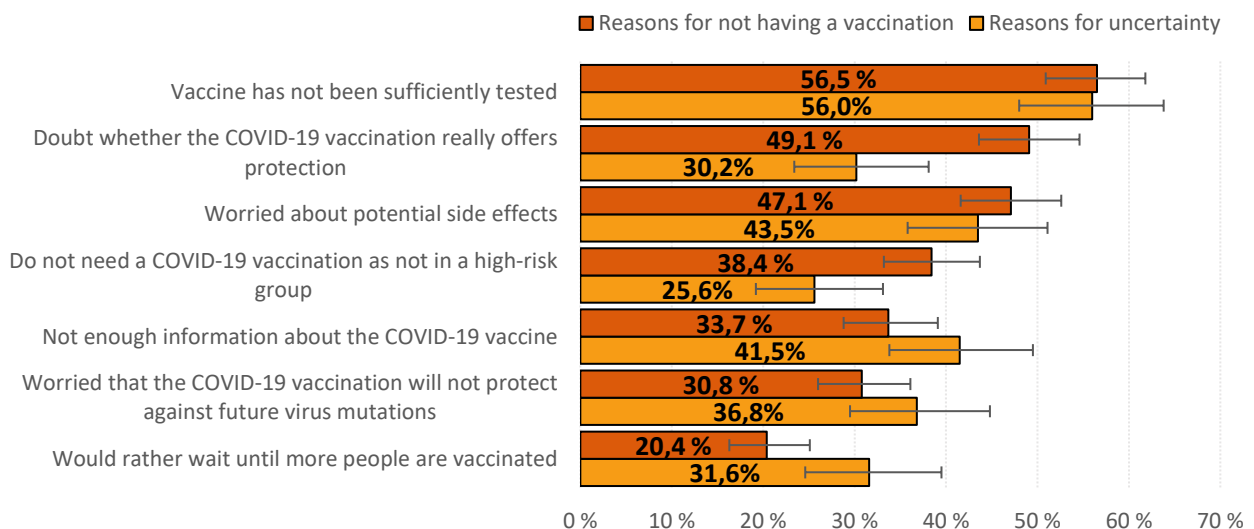
NB: Multiple answers could be given

the pandemic” or to protect someone close. Figure 6 sets out the reasons most frequently given (it shows reasons stated by at least 20% of respondents).¹⁵ The order of the reasons most frequently given by currently unvaccinated young people for being (very) likely to have a vaccination in the future are identical to the order shown in figure 6, except for places 1 and 2 being reversed.

The CoVaLux study (Leist et al., 2021) identified a similar order of most frequently cited reasons among 18 to 79 year olds in Luxembourg. However, the government’s recommendation was cited significantly less often as a reason for vaccination by this age group.

Figure 7 illustrates the reasons most frequently cited (more than 20%) by respondents who had not been vaccinated and state that they were

Figure 7: Reasons for not having a COVID-19 vaccination and for uncertainty given by more than 20% of respondents



NB: Multiple answers could be given

¹⁵ Less frequently cited reasons were: I want to protect by partner who is in a high-risk group (13.9%), my doctor recommends it (5.6%), my employer recommends it (4.0%) and

other reasons (6.7%) (see also Residori et al. (2021)).

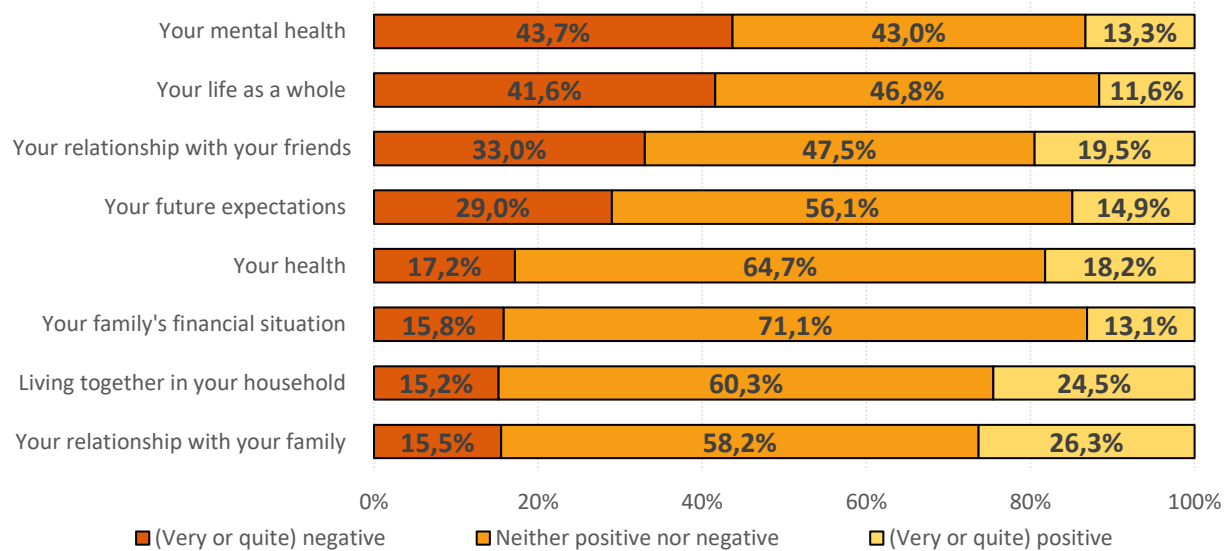
(very) unlikely to get vaccinated, and by respondents who had not been vaccinated and did not know yet if they would get vaccinated¹⁶. The majority of the reasons given by more than 20% of young people related to the effectiveness and safety of the vaccine and the need for vaccination. These reasons were also cited by young north Americans in group discussions for the Young Invincibles study (Hemlin et al., 2021). In addition, the YAC 2021 survey shows frequent mentioning of not feeling sufficiently informed about the COVID-19 vaccination. There are no clear differences by gender, age, migration background or socioeconomic status (SES) in the reasons stated here.

Perceived impact of the COVID-19 pandemic

The YAC 2020 study (Residori et al. 2020) identified that around 30% of young people perceived

a negative impact and around 25% of young people a positive impact of measures to combat COVID-19. In order to take a provide a more detailed insight into the impact of the COVID-19 pandemic and associated measures, the YAC 2021 survey asked the respondents about the negative and positive impact for various different areas of life. It asked about the impact on their life as a whole, their (mental) health, their family's financial situation, relationships with family and friends, living together in a household, and future expectations (see figure 8). Overall, young people in Luxembourg are more likely to cite negative impact of the COVID-19 pandemic and associated measures on their mental health (43.7%) and their life as a whole (41.6%). The negative impact of the COVID-19 pandemic on young people's mental health has also been confirmed by studies from Belgium (Rens et al., 2021), Spain (Rodríguez-Rey et al., 2020) and Italy (Rossi et al., 2020).

Figure 8: Perceived impact of the COVID-19 pandemic and associated measures



NB: Multiple answers could be given

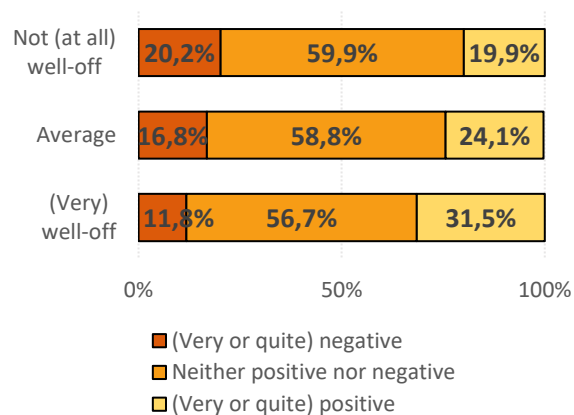
¹⁶ For a comprehensive overview of the reasons for not receiving a COVID-19 vaccination, see: Residori et al. (2021).

Young people in Luxembourg most frequently perceive a positive impact of the COVID-19 pandemic and associated measures on their relationship with their family and living together in their household. Around 26% and 25% respectively of young people cite a positive impact and around 15% saw a negative impact in these areas.

The areas least affected by the pandemic and associated measures (i.e. neither positive nor negative impact) were the family's financial situation (71.1%) and health (64.7%).

When examining the impact on the family's financial situation, it is clear that there is a strong link between socioeconomic status (SES) and the perceived impact of COVID-19 on the family's financial situation. People with a low SES report the pandemic having a somewhat negative impact on their family's financial situation (20.2%), whilst people with a high SES are more likely to report the pandemic having a positive impact (31.5%) or no impact on their family's financial situation (see figure 9).

Figure 9: Impact of the COVID-19 pandemic and associated measures on family financial situation, by SES

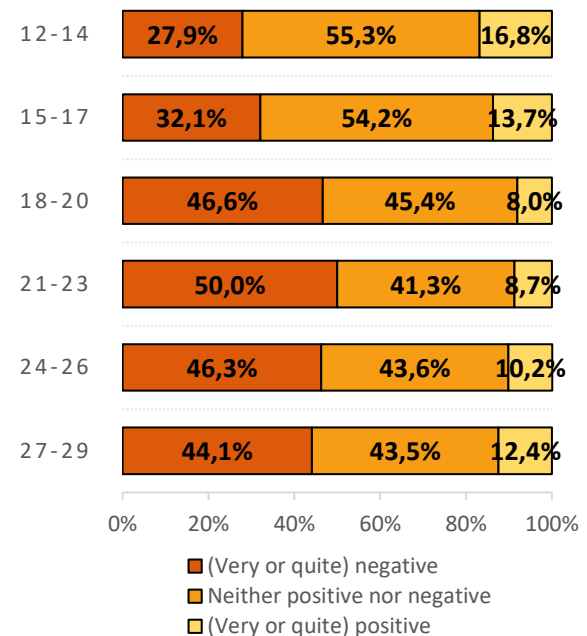


This observation could indicate further losses for the less financially well-off and further gains for the financially better off during the pandemic.

These findings confirm the results of last year's YAC 2020 report, which showed that respondents with a high SES were more likely than respondents with a low SES to have seen an increase in their individual or household income (Residori et al. 2020). Similar, although slightly less distinct differences were observed for the impact on the other areas of life by SES, i.e. respondents with a low SES were more likely to report a negative impact in all areas than respondents with a high SES.

Young people in different age groups perceive different levels of impact. Across all areas of life, younger respondents are more likely than older respondents to report a very positive impact, whilst older respondents are more likely than younger respondents to report a (very) negative impact (see figure 10). These differences are statistically significant across all areas of life, and are set out using the example of "life in general" in figure 10.

Figure 10: Impact of the COVID-19 pandemic on life in general, by age group

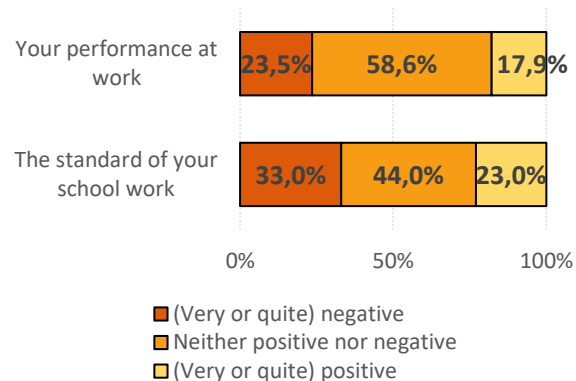


Gender-based differences in the impact of the pandemic and associated measures, however, are only observed in three areas of life: relationship with family, living together in the household and mental health. In these areas, female respondents are more likely than male respondents to have experienced a negative impact, whilst male respondents are more likely than female respondents to have perceived neither a positive nor a negative impact (Residori et al., 2021). Other studies also highlight these differences by gender in terms of mental health (Rens et al., 2021; Rodriguez-Rey et al., 2020; Rossi et al., 2020).

Young people's migration background only affects the impact they experience in terms of their relationship with friends and their family's financial situation to a statistically significant level (Residori et al., 2021). For example, respondents without a migration background are more likely than respondents with a migration background to report a negative impact on their relationship with their friends (37.6%) (first generation: 32.2%, second generation: 30.0%). With regard to the impact on the family's financial situation, these differences are reversed: people without a migration background (10.6%) are less likely than people with a migration background (first generation: 19.0%, second generation: 16.9%) to report a negative impact on their family's financial situation.

Looking solely at how the COVID-19 pandemic and associated measures to combat it have impacted young people's performance at school and work, there are various relevant results (see figure 11).

Figure 11: Impact of the COVID-19 pandemic and associated measures on school and job performance



The majority of employees surveyed (58.6%) states that the pandemic and associated measures did not have a positive or a negative impact on their performance at work. At around 24%, the proportion of people who experienced a negative impact was higher than those who experienced a positive impact (17.9%).

When analysing the effects of the pandemic on school performance, answers are more evenly distributed. Here, around a third (33.0%) of schoolchildren reported a negative impact, 44% neither a positive nor a negative impact, and 23% a positive impact (see figure 11).

Negative impact exceeds positive impact for both the school performance and the performance at work.

Statistically significant differences were identified by age and SES for the school performance. Older schoolchildren and those from families on low incomes were more likely to report that the COVID-19 pandemic and its associated measures had a negative impact on their school performance than younger schoolchildren and those from high-income families. For performance at work, similar differences were identified by SES but not by age. No statistically significant

differences were identified by gender or migration background for the impact of the COVID-19 pandemic in these areas.

In addition, the schoolchildren and students responding to the YAC 2021 survey were asked about changes to their school and study formats¹⁷ as a result of the pandemic situation, and the extent to which these changes had an impact on their learning experience and the duration of their learning.

a lot more. Around 18% report that they had learned the same amount despite a change to their school or study format.

No statistically significant differences were identified by gender, age, migration status or personal or family financial situation with regards to the perceived impact on learning due to a change of school or study format as a result of the COVID-19 pandemic.

Figure 12: Impact of a change of school or study format on learning (12-26 year olds)

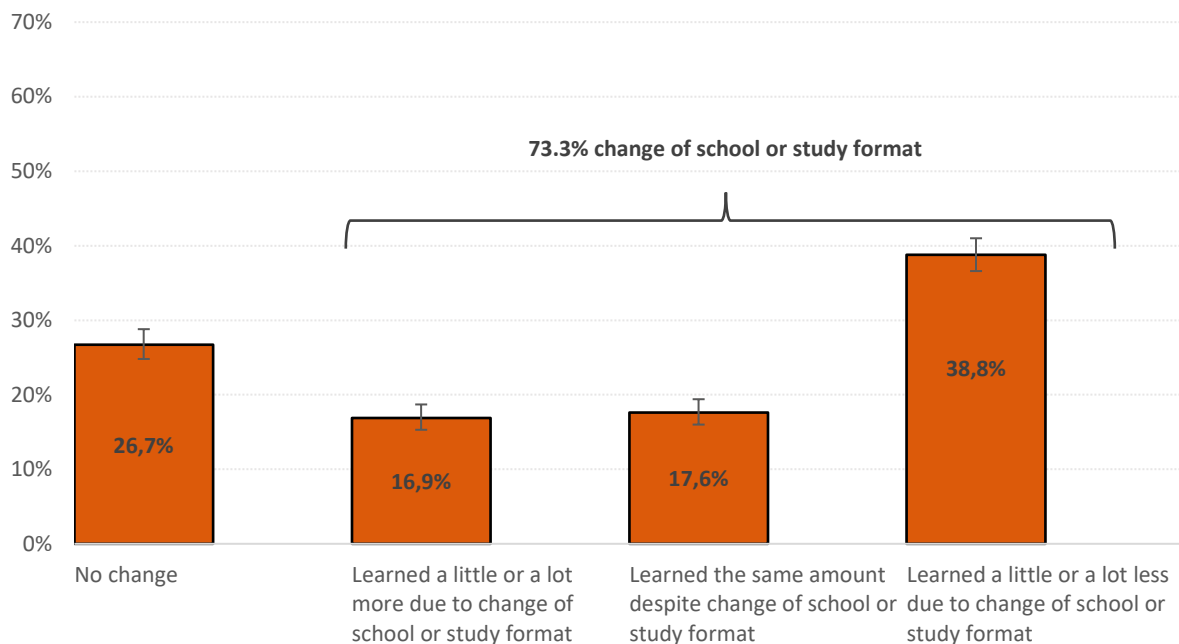


Figure 12 shows how such a change to the school or study format affected learning in the view of schoolchildren and students. According to this, around 73% of the schoolchildren and students surveyed state that their school or study format has changed as a result of the COVID-19 pandemic. Around 39% state that they had learned a little or a lot less as a result of this change. By contrast, at around 17%, fewer schoolchildren and students state that they had learned a little or

284 schoolchildren and students (around 15% of all the schoolchildren and students surveyed) report that the completion date for their schooling or studies had been altered as a result of the COVID-19 pandemic. Around a third of affected schoolchildren and students expect the end of their schooling or studies to be delayed by 1 to 5 months (33.6%) or 6 to 12 months (33.5%). Around 13% of affected schoolchildren and students are even expecting a delay of more than a

¹⁷ Including e.g. online courses, hybrid teaching.

year. The remaining 20% expect to finish earlier than originally planned.

In terms of changes to the end of schooling or studies, the low numbers and preliminary nature of the data mean that it is not reliable to make any statements regarding differences by gender, age, migration background or SES.

Summary

This report describes the situation of young people aged 12 to 29 during the second summer of the COVID-19 pandemic in Luxembourg. The preliminary, weighted and representative data from the YAC 2021 survey formed the empirical basis. The following core findings have been identified:

- Overall, - as in the previous year - young people in Luxembourg are coping rather well with the pandemic situation, and there are few changes in their coping level compared with 2020. As before, younger respondents, male respondents, respondents without a migration background, and respondents with a high socioeconomic status seem to be coping better with the pandemic situation than their peers.
- There has also been a statistically significant decrease in concern about the COVID-19 pandemic among young people since the summer of 2020. This reduction in the level of concern applies to all respondents, regardless of gender, age, migration background or SES. However, as in 2020, statistically significant differences are observed by gender, age and socioeconomic status (SES): female respondents, older respondents and respondents with a low SES were more likely to

report being very or quite worried about the pandemic.

- Compared with 2020, in 2021 young people in Luxembourg are finding it increasingly difficult to adhere to measures designed to combat the pandemic and protect against COVID-19. This is particularly the case among older respondents and respondents with a low SES. Nevertheless, the majority of young people continues to find it (very) easy to adhere to the measures.
- Acceptance of measures to combat the pandemic remains high but has fallen since 2020: in 2021 more respondents state that they felt the measures to be (somewhat) excessive compared to 2020. As in the previous year, male respondents are more likely than female respondents to report finding the measures (somewhat) excessive.
- The proportion of unvaccinated individuals decreases with the increasing age of the respondents. As unvaccinated 12 to 17 year olds report greater vaccination willingness than unvaccinated 18 to 29 year olds, there is potential for some alignment of the vaccination rate between age groups.
- Our findings also show that respondents with a low SES include a higher proportion of unvaccinated individuals than respondents with a high SES. Young people from a migrant background include a higher proportion of unvaccinated individuals than young people without a migration background. At the same time, male unvaccinated individuals and unvaccinated individuals from a migrant background more frequently reported being (very) likely to get vaccinated.

- The reasons most frequently cited by respondents who were already vaccinated or (very) likely to get vaccinated are “wanting to help society combat the pandemic”, protecting themselves and others, and gaining greater freedom or the ability to travel safely as a result of the vaccination.
- The reasons most frequently cited by respondents who were not vaccinated and were (very) unlikely to get vaccinated or unsure about vaccination are doubts about sufficient testing or the effectiveness of the vaccine, worries about side effects, and feeling that they were not in a high-risk group and therefore do not need to get vaccinated.
- Overall, young people in Luxembourg most frequently experience a negative impact from the pandemic on their mental health and their life as a whole. All areas of life considered, negative impacts outweigh positive impacts.
- Young people in Luxembourg most frequently cite positive impacts of the COVID-19 pandemic and associated measures on their relationship with their family and living together in their household.
- Respondents who attend school are more likely to report the pandemic having an impact on their school performance than respondents in working life were to report an impact on their performance at work.
- Around three quarters of the schoolchildren and students surveyed state that their school or study format had changed as a result of the COVID-19 pandemic. The majority states that these changes resulted in them learning less.

Conclusion

The results of the YAC 2021 survey indicate that the majority of young people in Luxembourg are continuing to successfully cope with the COVID-19 pandemic and associated measures. Both concern and acceptance of measures have declined somewhat compared with 2020. The fact that there was a trend for respondents finding measures more difficult to adhere to could be due to a certain level of pandemic fatigue.

These analyses of vaccination willingness demonstrate that young people who are not yet vaccinated are particularly likely to want to get vaccinated at a later date. Female unvaccinated respondents and respondents without a migrant background or from a second-generation migrant background were more likely to report not wanting to be vaccinated or to be unsure about the vaccination. These findings, in combination with the most frequently cited reasons for not having previously obtained a COVID-19 vaccination, could provide a basis for political measures to boost vaccination willingness. A promising line of enquiry could be COVID-19 vaccination information campaigns tailored to sub-groups (younger adolescents; women and girls), focusing on explaining testing procedures and vaccine effectiveness and refuting any misinformation about side effects.

Although the majority of young people experienced no impact or a positive impact from the COVID-19 pandemic and the associated measures, a considerable proportion of young people reported a negative impact on their mental health, relationships with friends, and future ex-

pectations. It is particularly important in this regard that the high-risk groups identified in the various areas of life quickly receive support and resources so that these perceived negative impacts can be counterbalanced, ensuring that individual disadvantages are not consolidated and strengthened.

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