



Data Article

Dataset on the questionnaire-based survey of the perceived risk of COVID-19 infection and Contact lens (CL) wearers



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ABSTRACT

The data set presents data collected by an online questionnaire, applying closed-ended question types (multiple-choice, Likert scale) and questions Skip Logic. Instruments from previous studies in the field of optometry such as Contact Lens User Experience (CLUE Scales), Quality of Life Questionnaire (CLIQ), Quality of Vision (QoV) Questionnaire, did not meet the needs of this study. Therefore, in order to provide a statistically valid and consistent instrument to examine the psychopathological reactions in Contact lens wearers due to COVID-19, a new questionnaire was designed. The steps followed to collect and manage data were, definition of the objectives of the study, questionnaire design, questionnaire pilot testing (validity, reliability, repeatability), data administration and results interpretation. This descriptive survey employed online data collection using an anonymized questionnaire. The questionnaire was made available via an online link on social networks from 28/09/2020 to 11/10/2020. The questionnaire, in order to record the psychopathological reactions in Contact lens wearers due to COVID-19, was structured according to three psychopathological reactions (COVID-RS scales), (a) disorganized behaviors, (b) avoidant behaviors, (c) maladaptive information consumption. Therefore includes, (a) socio-demographic variables such as, (age, gender, educational level, Professional status, geographical area of habitation), (b) Health and

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Consumer behavior in Contact lens wearers, (c) Perceived risk of infection due to COVID-19 in Contact lens users, with a total of 22 items and maximum completion time 4 min. The survey included 1676 participants, 1037 were Contact Lens users and completed the online questionnaire. Of them, 76.7% (795) were female and 23.3% (242) were male. The educational level of the participants was, 7.5% (8) primary education, 18.9% (197) Secondary education, 57.9% (601) Undergraduate education, 22.3% (231) Postgraduate education. According to the age groups, 68.2% (707) participants were between 18 and 34 years old, 23.4% (278) participants were between 35 and 54 years old, 4.8% (50) participants were between 55 and 74 years old, 0.2% (2) participants were 75 and over.

All data were exported to Excel spreadsheets. Only the completed questionnaires were used in the analyses. Data were analyzed using the Statistical Package for Social Sciences (SPSS) software version 24. Cronbach's alpha showed for the group, Health and Consumer behavior in Contact lens wearers (6 items), to reach acceptable reliability $\alpha = 0,881$. Cronbach's alpha showed for the group, Perceived risk of infection due to COVID-19 in contact lens wearers (6 items), to reach acceptable reliability $\alpha = 0,886$. The data set can be used to understand the relationship between the perceived risk of Covid-19 infection and contact lens (CL) use, the potential effect of the pandemic in Health and consumer behavior in Contact lens users, to draft a survey strategy and design, to verify results, etc.

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Specifications Table

Subject	Public Health and Health Policy
Specific subject area	Vision Science, Perceived risk of infection and the impact of Covid-19 pandemic in Health and Consumer behavior in contact lens users.
Type of data	1. Primary Data 2. Figures
How data were acquired	Online Survey
Data format	Raw
Parameters for data collection	Participation in the study was voluntary and anonymous. The study sample includes Contact Lens wearers ≥ 18 years of age who were invited to participate in an online survey to assess the impact of the COVID-19 pandemic in Contact Lens wearers behavior during the first Lockdown in Greece. The survey conducted on social networks from 28 September to 11 October 2020.
Description of data collection	<i>The data have been stored in the files according to three psychopathological reactions (COVID-RS scales), a) disorganized behaviors, b) avoidant behaviors, c) maladaptive information consumption. Therefore includes socio-demographic variables such as, age, gender, educational level, profession status, geographical area of habitation (5 items), Health and Consumer behavior in Contact lens wearers (6 items), perceived risk of infection and behaviors due to Covid-19 in Contact lens users (9 items) [3,7,8].</i>

(continued on next page)

1676 volunteers participated in the survey, 1037 were Contact Lens users and completed the online questionnaire. Only the completed questionnaires were used in the analyses. The data set of each participant's responses were exported to Excel spreadsheets and provided as a supplementary file [2]. Furthermore, data figures are presented for each group of variables using frequencies and percentages: (a) Participants socio-demographic characteristics are depicted in Figs. 1–3, (b) Health and Consumer behavior in Contact lens wearers are depicted in, Figs. 4–9, (c) Perceived risk of infection and behaviors due to Covid-19 in contact lens wearers are depicted in Figs. 10–15.

Data source location

Institution: University of West Attica

City/Town/Region: Athens, Attica

Country: Greece

Data accessibility

<https://data.mendeley.com/datasets/xbphjxbk9p/1>

<https://data.mendeley.com/datasets/26p3kym3cm/2>

Related research article

A. Chandrinou, D.D. Tzamouranis, Effect of the COVID-19

Pandemic on Contact Lens Wear in Greece, *Ophthalmology Research: An International Journal*, 14(1) (2021) 22-29.

<https://doi.org/10.9734/orj/2021/v14i130180>

Value of the Data

- This study provides a new statistically valid and consistent psychometric measure to examine the psychopathological reactions in Contact lens wearers due to COVID-19.
- The data can be used to analyze, describe and understand the contact lens users profile. More specific to record, the health and consumer behavior, adaptation, perception risk of infection under unusual conditions such as Covid-19 pandemic, e.tc.
- The data set concerns and can be utilized by researchers and scientists in the fields of public health, public economy and marketing.
- The data can be used in further research in different countries and regions, draft a survey strategy and design, compare and verify results, record and predict significant or not significant correlations.
- The questionnaire can be used with the same structure or in variations as a useful data collection tool for similar research in different scientific fields.

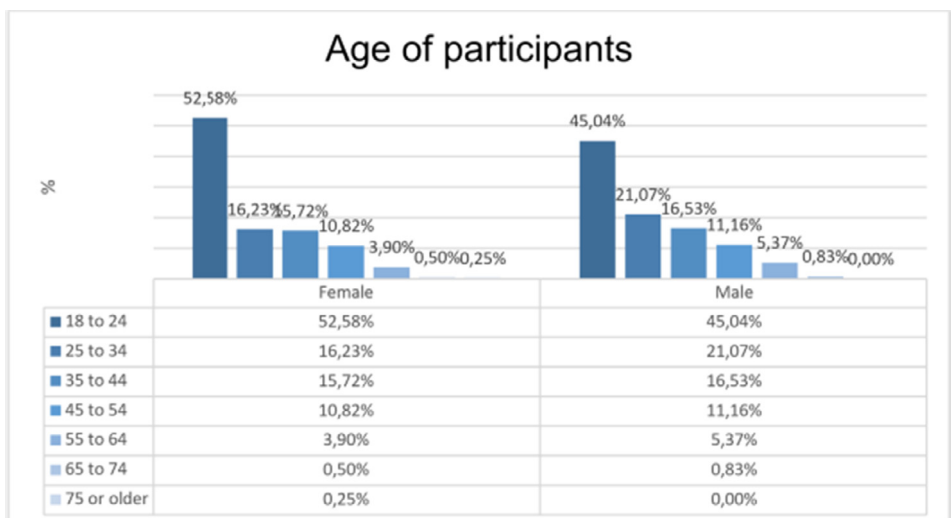


Fig. 1. Age of participants based on gender, (n = 1037, F = 795, M = 242).

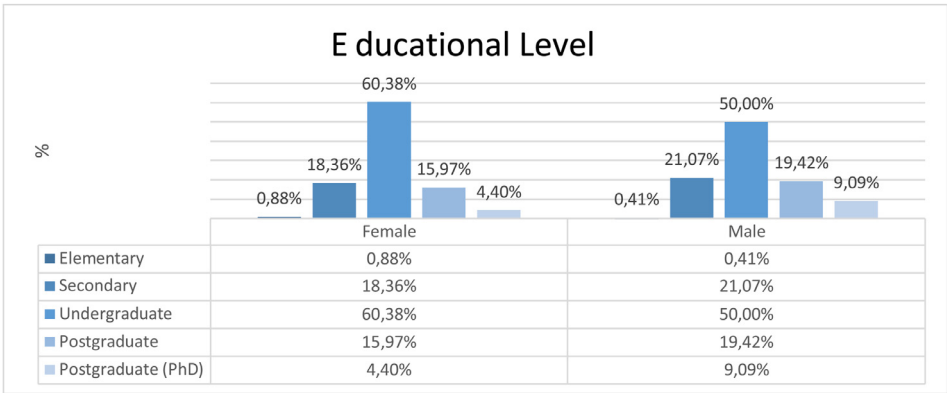


Fig. 2. Educational level, contact lens wearers.

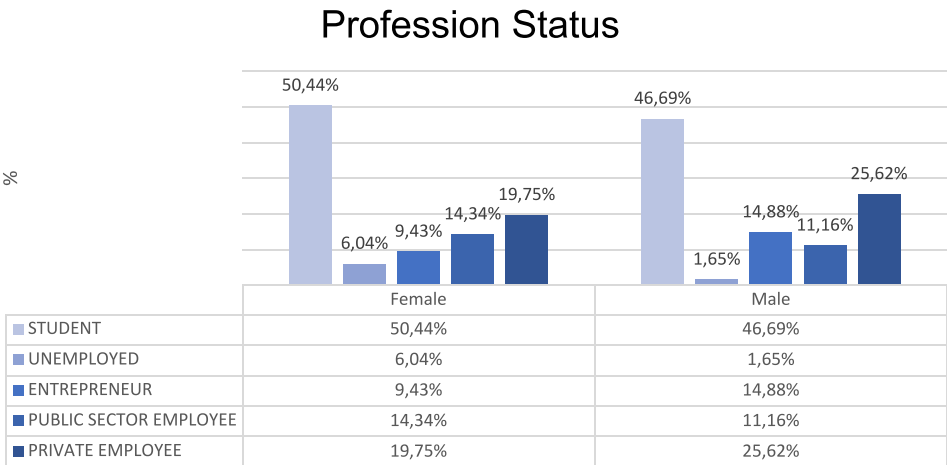


Fig. 3. Professional status of contact lens users.

1. Data Description

The data set acquired for the study “Effect of the COVID-19 Pandemic on Contact Lens Wear in Greece” by an online questionnaire, consists of closed-ended question types, multiple-choice, 5-point Likert scale, dichotomous questions and questions Skip Logic [1–3]. The questionnaire was structured according to three psychopathological reactions (COVID-RS scales), (a) disorganized behaviors, (b) avoidant behaviors, (c) maladaptive information consumption. Therefore includes Socio-demographic variables such as, age, gender, educational level, profession status, geographical area of habitation (5 items), Health and Consumer behavior in Contact lens wearers (6 items), Perceived risk of infection and behaviors due to Covid-19 in Contact lens users (9 items) [3,7,8].

The survey, included 1676 participants, 1037 were Contact Lens users and completed the online questionnaire. Only the completed questionnaires were used in the analyses. The data set of each participant’s responses were exported to Excel spreadsheets and provided as a supplementary file [2]. Furthermore, data figures are presented for each group of variables using frequencies and percentages: (a) Participants socio-demographic characteristics are depicted in Figs. 1–3,

Reasons for Contact lens use

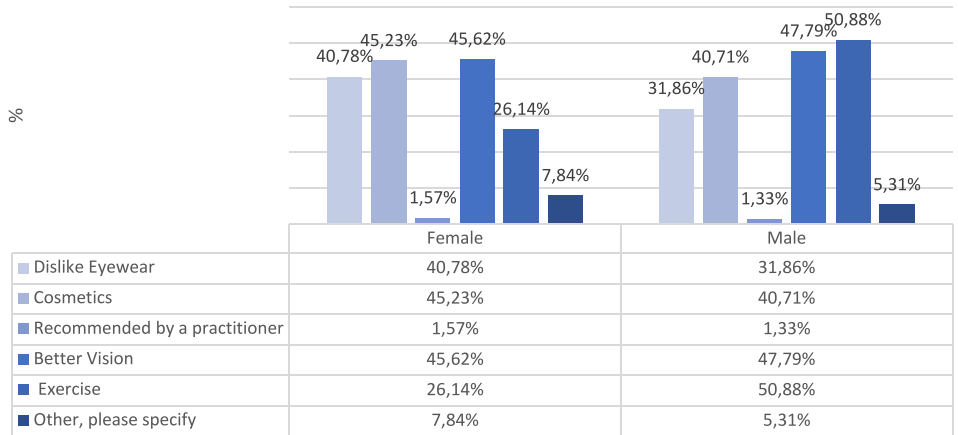


Fig. 4. Consumer behavior according the reasons for contact lens use. (n = 991, skipped = 46, F = 765, M = 226).

Contact lens use Experience

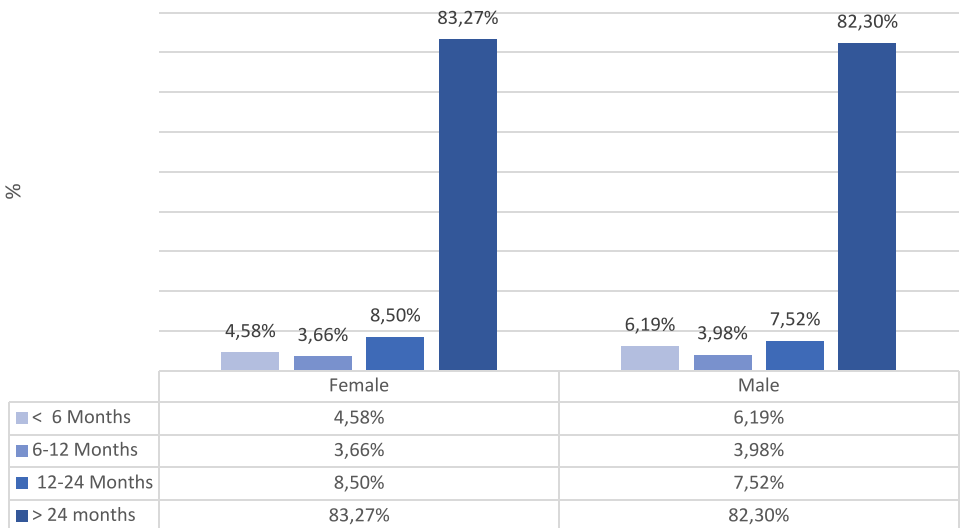


Fig. 5. Participants in contact lens users experience time.

(b) Health and Consumer behavior in Contact lens wearers are depicted in, [Figs. 4–9](#). Cronbach's alpha showed the group to reach acceptable reliability $\alpha = 0,881$. (c) Perceived risk of infection and behaviors due to Covid-19 in contact lens wearers are depicted in [Figs. 10–15](#). Cronbach's alpha showed the group to reach acceptable reliability $\alpha = 0,886$.

Contact lens use, Weekly

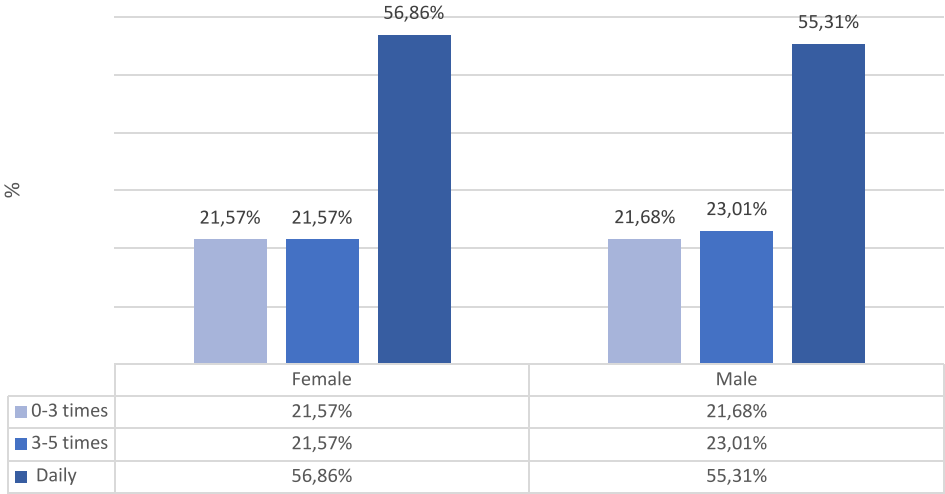


Fig. 6. Participants contact lens use per week.

Contact lens use, Hourly

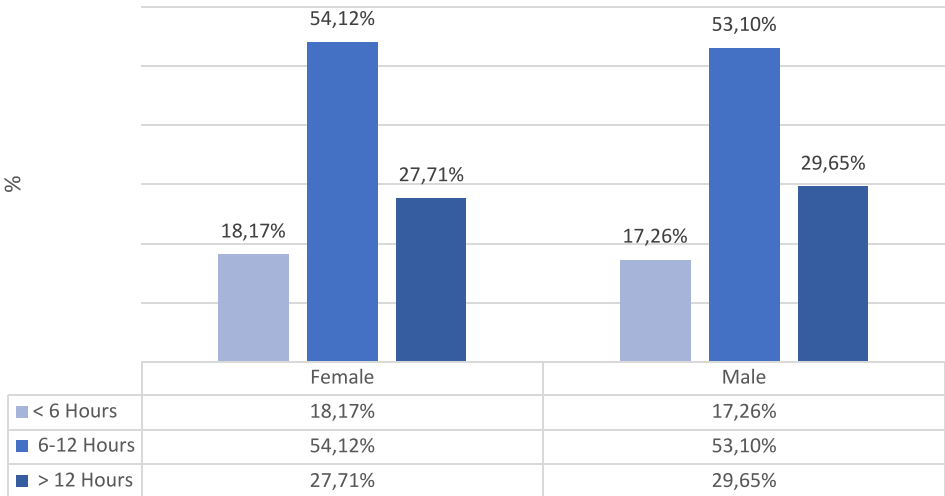


Fig. 7. Participants contact lens use in hours.

2. Experimental Design, Materials and Methods

Instruments from previous studies in the field of optometry such as Contact Lens User Experience (CLUE Scales) [4], Quality of Life Questionnaire (CLIQ) [5], Quality of Vision (QoV) Questionnaire [6], did not meet the needs of this study. Therefore, in order to provide a statistically valid and consistent instrument to examine the psychopathological reactions in

Type of Contact lens

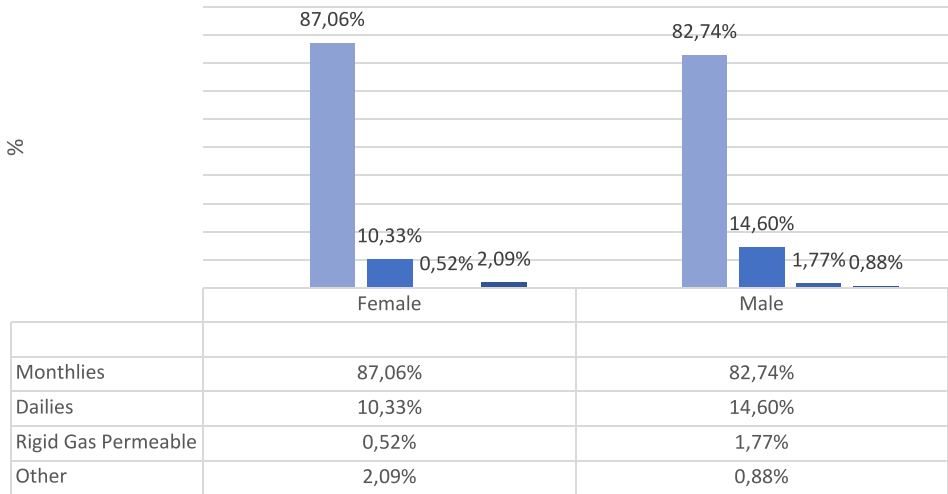


Fig. 8. Participants preference in contact lens type.

Place of Purchase

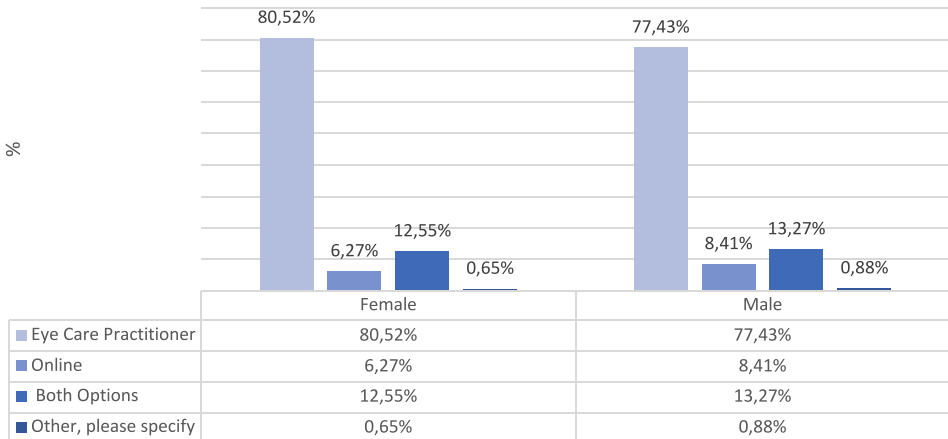


Fig. 9. Preferred way of buying contact lenses.

Contact lens wearers due to Covid-19, a new questionnaire was designed, consists of closed-ended question types, multiple-choice, 5-point Likert scale, dichotomous questions and questions Skip Logic [1–3]. The steps followed to collect and manage data were, definition of the objectives of the study, questionnaire design, questionnaire pilot testing (validity, reliability, repeatability), data administration and results interpretation. The online survey conducted on social networks from 28 September to 11 October 2020, when Contact lens wearers could evaluate the reactions and consequences of the first strict national lockdown and realize the reasons for possible alterations in Contact lens use due to COVID-19 pandemic. The authors developed the structure of the questionnaire in two languages (Greek & English) including 22 items and maximum completion

Impact in Contact lens use due to Covid-19, Lockdown A', 23 March-4 May 2020

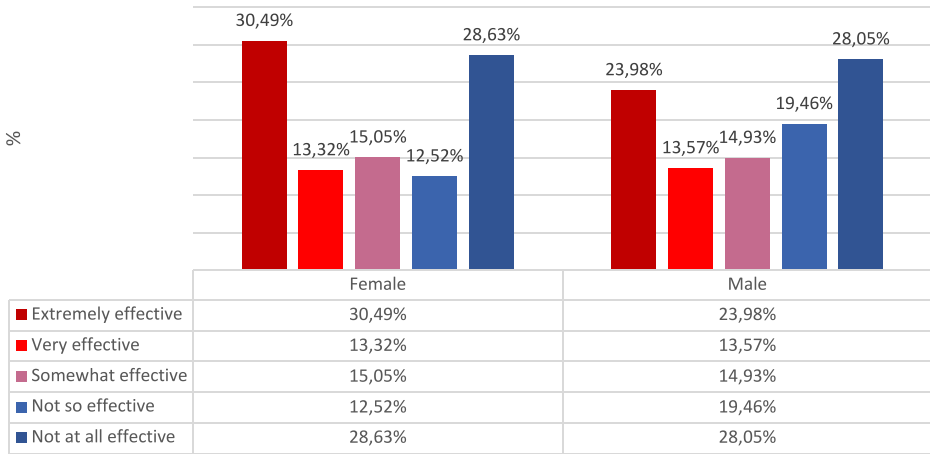


Fig. 10. To what extent contact lens users affected due to COVID-19, (n = 972, skipped = 65, F = 751, M = 221)

Reactions in Contact lens use due to Covid-19

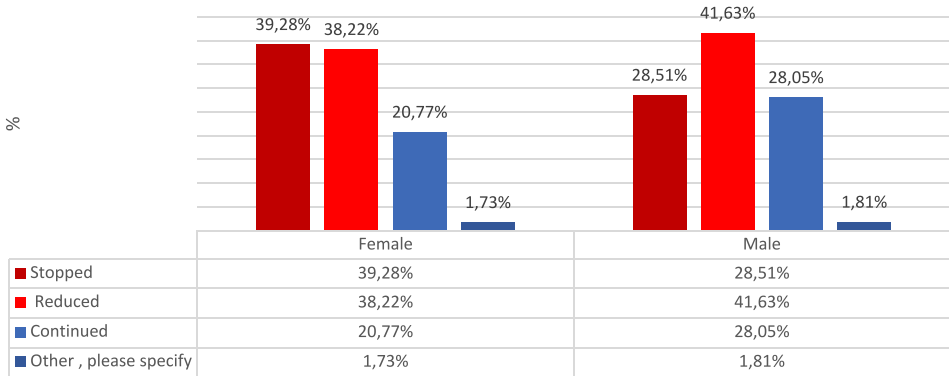


Fig. 11. Reactions of contact lens users due to COVID-19, according to gender.

time 4 min. Initially, a group of Contact lens users was invited in order to evaluate all the items in terms of clarification and time management. All the participants were Contact lens users ≥ 18 years of age who were invited to participate in an anonymous online survey, expressed their consent to participate in the research and processing of anonymous data for scientific purposes. Participation in the study was voluntary. As part of the research, the "SurveyMonkey" software was used to obtain the data, configure and communicate the questionnaire. In order to record the psychopathological reactions in Contact lens wearers due to COVID-19, the questionnaire was structured according to three psychopathological reactions (COVID-RS scales), (a) disorganized behaviors, (b) avoidant behaviors, (c) maladaptive information consumption. Therefore includes three major groups of variables, (a) socio-demographic, (b) Health and Consumer behavior in Contact lens wearers, (c) the perceived risk of infection and behaviors due to Covid-19

Reasons for Stopping Contact lens use

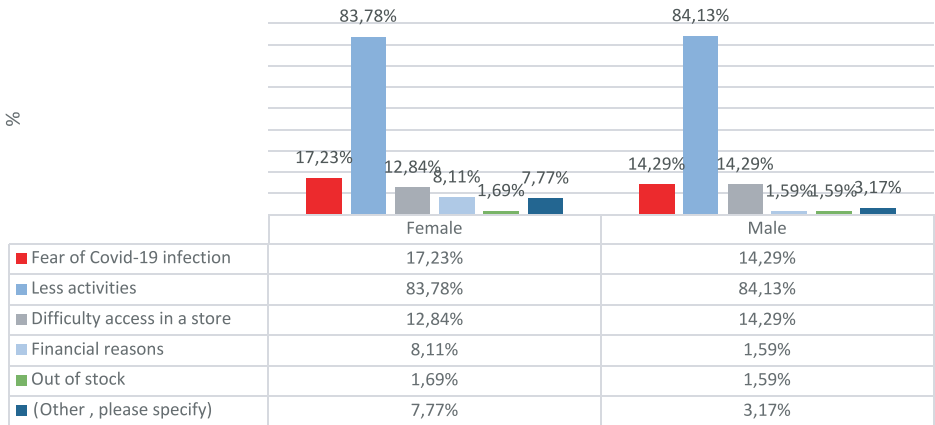


Fig. 12. Reasons for stopping Contact lens use due to COVID-19, according to gender, (n = 359, skipped = 678, F = 296, M = 63).

Reasons for Reducing Contact lens use

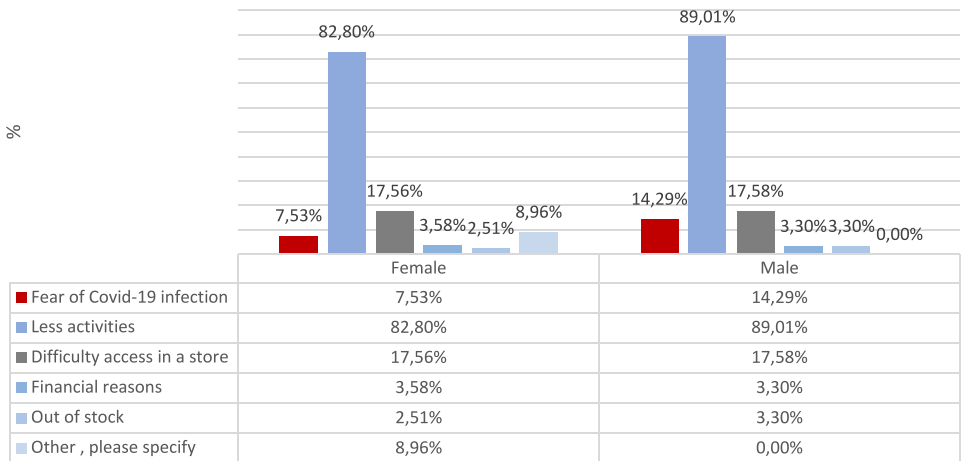


Fig. 13. Reasons for Reducing Contact lens use due to COVID-19, according to gender, (n = 370, skipped = 667, F = 279, M = 91).

in Contact lens wearers [7,8]. All data were exported to Excel spreadsheets. Only the completed questionnaires were used in the analyses. Data were analyzed using the Statistical Package for Social Sciences (SPSS) software version 24. Cronbach's alpha showed for the group Health and Consumer behavior in Contact lens wearers (6 items), to reach acceptable reliability $\alpha = 0,881$. Cronbach's alpha showed for the group Perceived risk of infection due to Covid-19 in contact lens wearers (6 items), to reach acceptable reliability $\alpha = 0,886$ [9].

Contact lens use increase the danger of COVID-19 infection

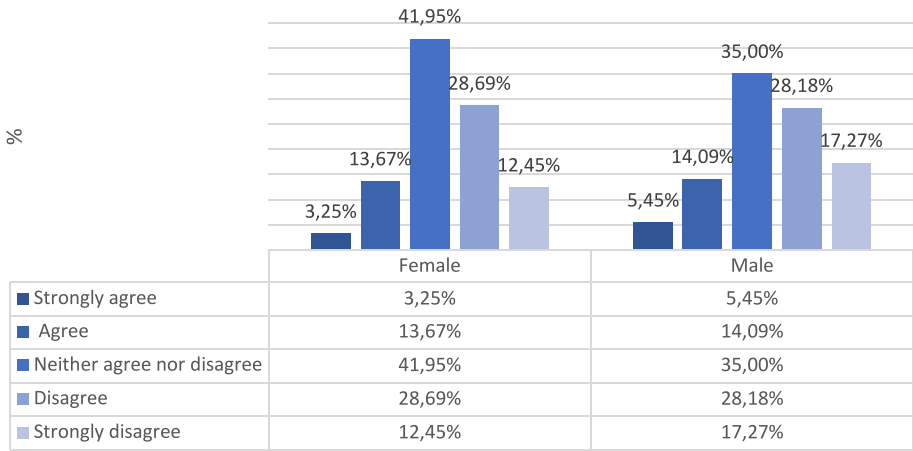


Fig. 14. To what extent contact lens users reacted in information consumption such as “contact lens increase the danger of COVID-19 infection”, (n = 959, skipped = 78, F = 739, M = 220).

Vision goggles protect from Covid-19 infection

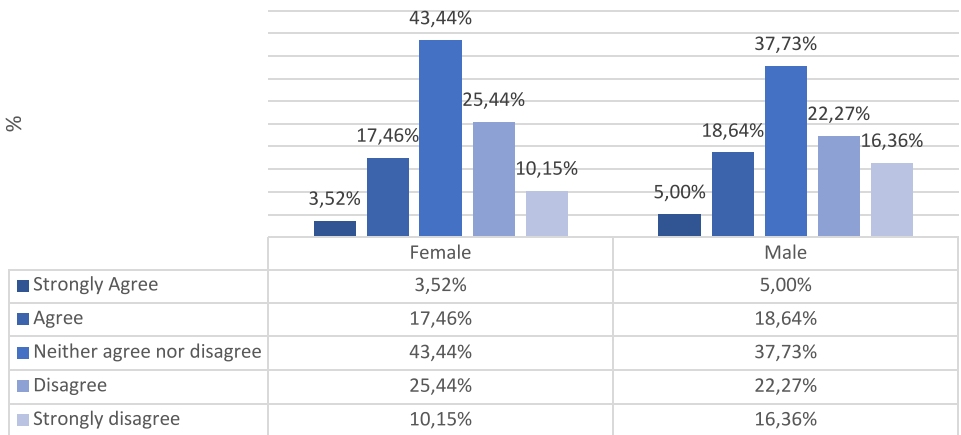


Fig. 15. To what extent contact lens users reacted in information consumption such as “vision goggles protect from COVID-19 infection”, (n = 959, skipped = 78, F = 739, M = 220).

Ethics Statement

Every responder expressed his/her consent to participate in the research and processing of anonymous data for scientific purposes.

CRediT Author Statement

Dorotheos Dimitrios Tzamouranis: conceptualization, methodology, writing first draft, questionnaire structure, software, Data curation, Writing - Reviewing and Editing; **Aristeidis Chandrinou:** conceptualization, methodology, writing first draft, Writing - Reviewing and Editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships which have or could be perceived to have influenced the work reported in this article.

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