Psychological evaluation of a sample of Cuban children recovering from COVID-19

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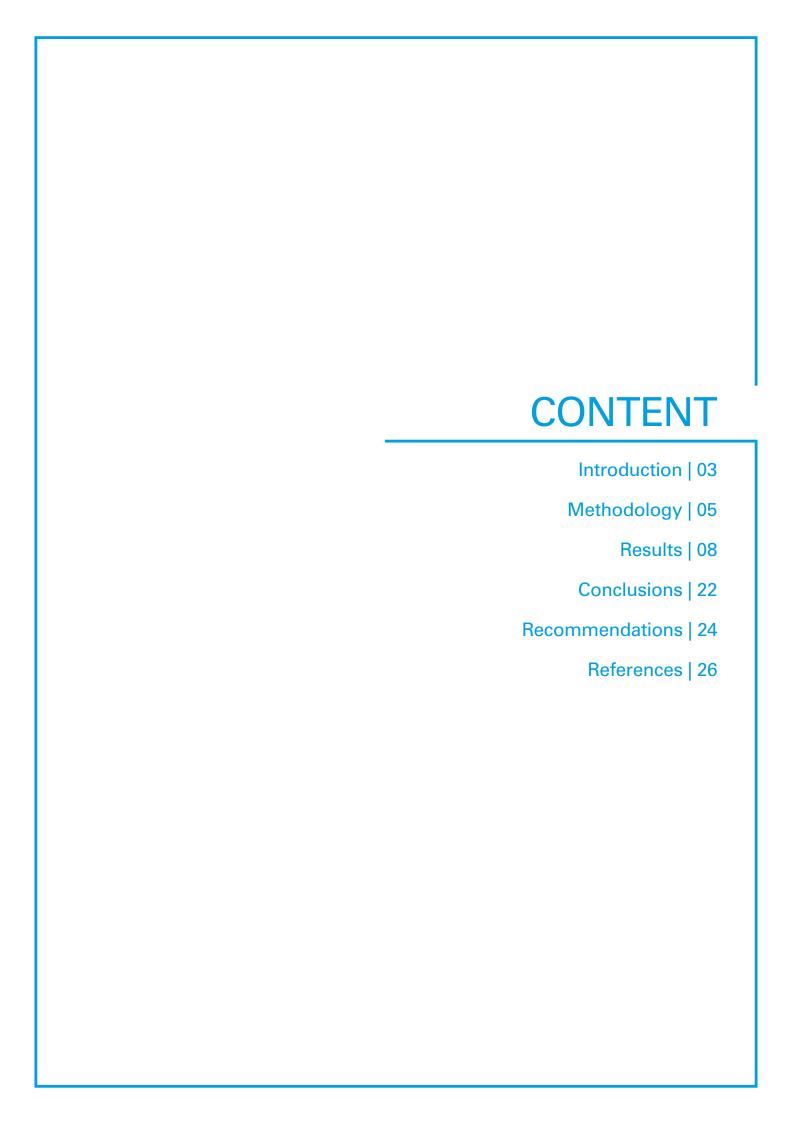
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INTRODUCTION

Science and technology play a fundamental role in the fight against COVID-19 in Cuba. In a constant relationship with government management, research developments in several scientific disciplines are focused on results that offer health, social and political answers to the challenges posed by the pandemic.

Science-policy interaction is carried out through a work system that includes: the government's direct dialogue with experts and professionals, the promotion of inter-institutional and inter-sectoral collaboration and interdisciplinary participation, research that accelerates responses, and active public communication to improve information available to the population and its behaviour (Díaz-Canel & Núñez, 2020).

Mental health prevention and psychological support programs in the face of the COVID-19 pandemic is one of the areas that has mobilized expert knowledge. Experts in this area work under the coordination of the Mental Health Department of the Ministry of Public Health and implement differentiated protocols for mental health support to health workers, vulnerable groups and care for convalescents, both adults and

children. Within the framework of the inter-institutional collaboration between the Ministry of Public Health (MINSAP), the University of Havana's School of Psychology and the Latin American Faculty of Social Sciences (FLACSO-Cuba), and the UNICEF Cuba office, a mental health assessment of the population of Cuban children and adolescents convalescing from COVID-19 has been planned.

The evaluation comprises four aspects:

- Screening for the presence of psychopathology.
- Neurological study.
- Characterization of family coping.
- Characterization of psychological well-being.

The team of researchers from the Faculty of Psychology of the University of Havana took on the characterization of psychological well-being. This report offers preliminary results obtained in a sample of children and adolescents from Havana province. The findings described should be understood as derivations of a pilot test of the research objective and its methodological design.

METHODOLOGY

At the time of the research, 98 children aged 0 - 18 years had been reported to have suffered from CO-VID-19 in Havana. The study sample consisted of 44 children and adolescents convalescing after COVID-19.

Techniques were applied by the psychology and psychiatry services of the Provincial Health Department in Havana.

The usual techniques in the clinical process of psychological assessment were used. From the methodological point of view and, as it is commonly seen in childcare, a triangulation was made between the information coming from direct sources (children or adolescents themselves) and indirect sources (the main caregiver).

Each technique was evaluated quantitatively based on the analysis of frequencies, percentages and the relationship between significant variables that emerged from the study. These data were analysed qualitatively and enabled a characterization of the state of psychological well-being of this sample of children and adolescents who have suffered from COVID-19.

The following techniques were applied on children aged 5-12 years (6th grade of schooling):

- Psychographic techniques: for the analysis of the cognitive, emotional and socio-relational spheres.
 - Spontaneous or free drawing.
 - Family drawing technique.
 - COVID-themed drawing.

Three Wishes, Three Fears, Three Discomforts Technique: for the analysis of information about the main needs and motivations, worries, fears, psychological discomfort and updating of experiences related to the disease.

For children aged 12 (7th grade of schooling) to 18 years, the following were applied:

- Psychographic technique: for the analysis of the cognitive, emotional and socio-relational spheres.
 - Spontaneous or free drawing.
- Thematic composition: for the analysis of information about the current mood, updating of experiences related to the disease, emotional impact, future projections; as well as emotional processes, socialization, depression, energy, anxiety and distress.

The following techniques were applied to children's main caregivers in the sample:

 Socio-psychological interview about the child or adolescent: the interview provided all data related to the socioeconomic and cultural contextualization of the family, biological and psychophysiological potentialities, potentially psycho-pathogenic factors and attitudes, physical and psychological development, habit formation, family dynamics and autonomy. This

- interview focused on psychological symptoms or maladjusted behaviours, which were observed in children after COVID-19.
- 2. Caregiver questionnaire: this collected information about the physical and psychological state of the caregiver, his/her availability and
- accessibility to the child, quality of the bond, his/ her assessment of the child and the support he/ she requests.

Children under five years of age were evaluated by means of the instruments applied to the caregivers

	RESULTS

It should be mentioned that due to irregularities in the evaluation process, there were some cases in which not all planned techniques were applied. Since a battery of techniques was used, this did not prevent the assessment of each case. However, it did pose a challenge when handling different figures in the global analysis of the instruments, which has been made explicit in this document when referring to the analysis of each psychological technique.

All 44 children and adolescents were distributed by age group and sex. Table 1 shows the same age distribution pattern of the child population identified during the course of the epidemic (García et al., 2020; Íñiguez et al., 2020), with the highest incidence in the 12-18 age group: Figure 1 indicates that, with respect to sex, the sample reflects a predominance of boys.

Table 1. Sample by age groups (frequency and percentages).

AGE GROUP	FREQUENCY	PERCENTAGE
1 to 3 years	6	13.60%
4 to 5 years	4	9.10%
6 - 8 years	7	15.90%
9 to 11 years	9	20.50%
12 to 18 years	18	40.90%

Source: Authors.

The following is an analysis of a set of variables that characterize the context in which the sample children who became ill with COVID-19 live: municipalities of residence, educational and income levels of the family,

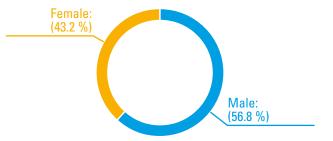


Figure 1. Distribution of the sample by sex (percentage). **Source:** Authors.

housing conditions, and family typology. The results of the application of a series of evaluation techniques are described below.

The distribution of the sample by municipality of residence was as follows:

Table 2. Age groups of the sample by municipality of residence (frequencies and percentages).

MUNICIPALITY	FREQUENCY	PERCENTAGE
10 de Octubre	5	11.40%
Arroyo Naranjo	8	18.20%
Centro Habana	7	15.90%
Cerro	2	4.50%
Cotorro	2	4.50%
Guanabacoa	3	6.80%
Habana del Este	6	13.60%
Playa	1	2.30%
Plaza de la Rev.	3	6.80%
Regla	3	6.80%
San Miguel	4	9.10%

Figures 2 and 3 show frequency distributions according to the educational and economic level of the families of the children included the sample.

In terms of education, it can be seen that 46.5% of families in the sample have middle level of education, while 9.3% of them have reached a higher education level.

The data on income levels were analysed according to the average wage income in the province of Havana as reported by the National Office of Statistics and Information (ONEI, 2017). It can be observed that 52.5 % of the families receive incomes below the average

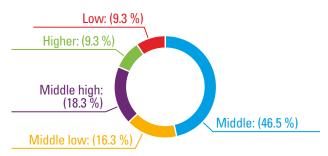


Figure 2. Educational level of families (percentage). Source: Authors.

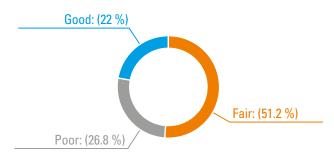
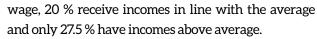


Figure 4. Housing conditions (percentage). **Source**: Authors.



Figures 4 and 5 show that the housing conditions of these children and adolescents are classified as fair in the majority of the cases (51.2%), 26.8% as poor and only 22% as good. Overcrowding was reported in 34.1% of the families studied.

Figure 6 on family typology shows the predominance of single-parent families (mother and children) in 37% of the sample studied, in addition to 14.3% of extended single-parent families. Nuclear families represent 31% of the total.

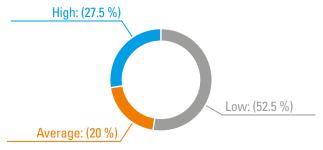


Figure 3. Income level of families (percentage). Source: Authors.

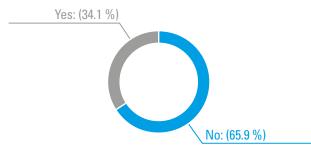


Figure 5. Overcrowded housing (percentage). **Source:** Authors.

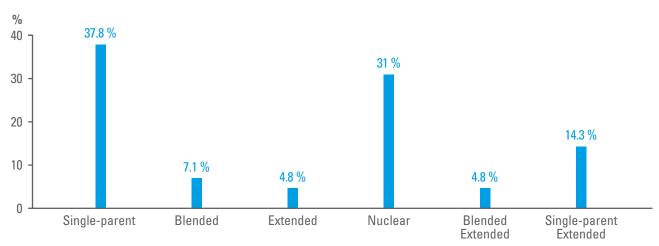


Figure 6. Types of families (percentage). **Source:** Authors.

Analysis of the primary caregiver questionnaire.

The questionnaire was answered by 42 subjects. Mothers represented 95.2% of interviewed primary caregivers of children and adolescents in the sample. In the remaining two cases, respondents were a maternal grandmother and great-grandmother, respectively.

Just over half of caregivers (58.5%) report feeling well, while the rest (41.5%) express some level of discomfort whether physical, psychological or general (which includes both physical and psychological) (Figure 7).

About 84.6 % of caregivers report they are staying home and available to their children all day at the moment. Figure 8 indicates that the rest (15.4%) are working, so they are accessible in the afternoons and evenings.

Regarding the activities that they perform together with their children, playing is reported by 42.9 % of caregivers. The rest of the activities they referred to can be seen in Figure 9. There are no other highly repre-

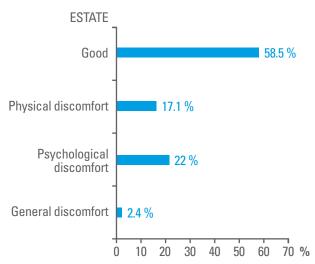


Figure 7. Current state of the caregiver (percentage). **Source:** Authors.

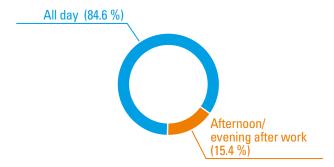


Figure 8. Time spent with children (percentage). **Source:** Authors.

sentative responses that speak of a significant link as a tendency in the sample. About 16.7% of them, which is equivalent to seven children, reported not doing any activity with their child.

About 51.4% of caregivers reported they had not detected any symptoms or behavioural disturbances in the children and adolescents. Figure 10 breaks down the remaining 48.6% into those (27%) who report not being able to properly handle changes in their children's behaviour (they get upset, yell, punish, etc.), and those (21.6%) who say they are able to manage their children's upbringing well, despite their maladjustments.

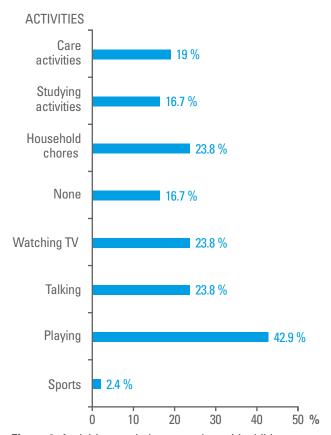


Figure 9. Activities carried out together with children (percentage).

 $\textbf{Source:} \ \mathsf{Authors}.$

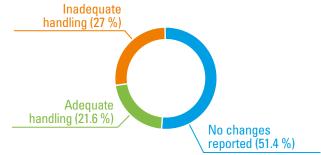


Figure 10. Handling of the child's changes in behaviour (percentage)

With respect to specific concerns about the children, 39% of caregivers expressed that they had none, while 29.3 % were concerned about physical health and only 19.5 % were concerned about the psychological management of the child or adolescent's changes as a result of having suffered from COVID.

On the other hand, 7.2 % are concerned about family situations involving the child and 4.9 % worry about the fact that they have not studied during the learning-at-home period.

Regarding the types of support required, 29.3 % of caregivers reported not needing any. Medical support was requested by 17.1 %, economic and material support by 14.6 % and psychological support by 31.7 %. The latter contrasts with the 19.5% who expressed concern about the psychological management of their children.

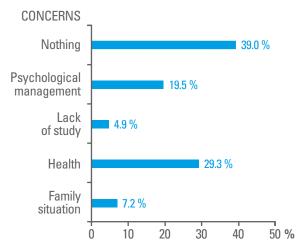


Figure 11. Caregivers' concerns about children (percentage).

Source: Authors.

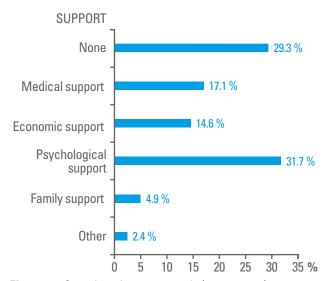


Figure 12. Caregivers' support needs (percentage). **Source**: Authors.

Analysis of the clinical symptoms questionnaire

The clinical symptoms detected by 37 caregivers who reported the presence of these manifestations in their children have low representation in the sample, as shown in Figure 13. Finger sucking, tics and loss of interest are not reported as symptoms in any case of the sample.

This low representation of all symptoms in the children and adolescents evaluated does not coincide with the data obtained in a research on the effects of isolation in Cuban children and adolescents (García, Castellanos, Alvarez, & Pérez, 2020). The group of researchers, based on the experience of facilitating psychological support groups through WhatsApp, has the hypothesis that, in many cases of the sample studied,

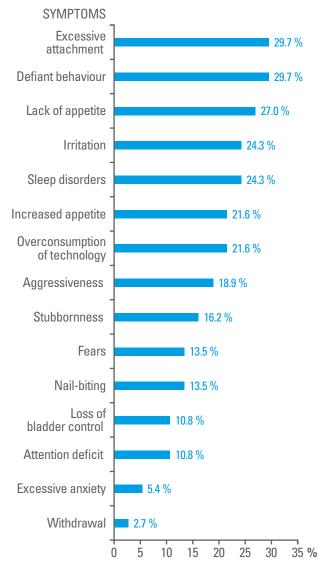


Figure 13. Symptoms reported by caregivers (percentage based on the total number of infected individuals). **Source:** Authors.

there is no proper observation of children's behaviour, nor awareness of problems regarding the possible psychological effects on children.

Figure 14 shows a comparison between the symptoms with highest incidence in the sample of children and adolescents who suffered from COVID-19 and in the aforementioned sample of healthy children who were in isolation (García et al., 2020).

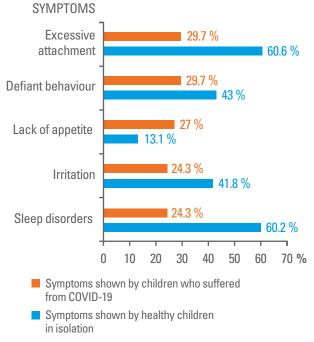


Figure 14. Five most frequent symptoms shown by children with COVID-19 and healthy children in isolation. **Source:** Authors.

Except for the lack of appetite, the rest of the symptoms have higher incidence in healthy children. In the case of convalescent children, lack of appetite may be a consequence of the disease itself.

Taking into account that the children studied in the aforementioned research were under the effects of social isolation and that those included in this study have experienced isolation, in addition to the psychological impact of having suffered from COVID-19, it is not possible to reliably assure that the former have more complex symptoms of psychological maladjustment than the latter.

Analysis of the "Three wishes, three fears, three discomforts" technique

The analysis of the technique (Figure 15) indicates that 14 out of the 15 children who participated show a sig-

nificant presence of psychological distress related to the fact of having suffered from COVID-19.

According to the absolute frequency count, the responses behave as follows:

The most recurrent contents (22) are directly related with being sick. The children express their wishes for them and their families to maintain good health, they fear the disease and medical procedures and long for COVID to end. In addition, seven other responses have to do with an increased need for attachment, and family unity and well-being during this time.

The type of content with the second greatest presence among these children is not directly related to their COVID-19 convalescence. It is striking how frequently conflicts with other children and family members, which may involve some level of abuse (15), are reported.

The need for play, fun and socialization, normally of great significance in children and adolescents, is represented in only seven responses. This indicates that, in the sample studied, the concerns and needs related to the illness suffered are greater at this moment, which reinforces the level of psychological impact that this event has had on them.

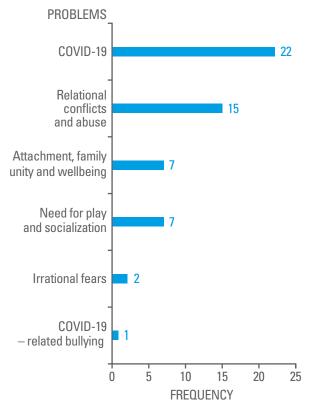


Figure 15. Integration of the technique "three wishes, three fears, three discomforts" (frequency). **Source:** Authors.

Analysis of psychographic techniques

A total of 29 individuals, 16 children and 13 adolescents, were analysed with this technique. The analysis included executive functions, emotional processes with emphasis on the impact of the disease, socialization and family environment.

Regarding executive functions, 28 out of 29 assessable children (96.6%) show an organized line of thought, in which the emotional impact does not disorganize the cognitive processes. This suggests good potential for the recovery process, even though intelligence in most of the children ranges from average to low. In terms of psychic energy, 69% of the sample displays average levels of psychic energy. The fact that 17.2% of children show weak levels of energy is striking, as it

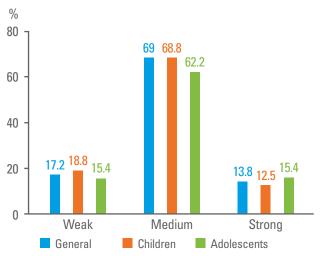


Figure 16. Psychic energy exhibited (percentage). Source: Authors.

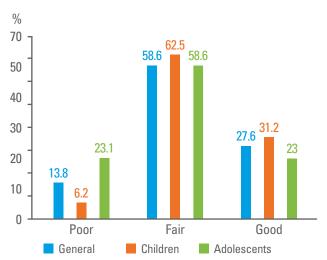


Figure 18. Comparison between children and adolescents in terms of motor maturity (percentage).

Source: Authors.

is not characteristic of children without disorders and may be related to long-term effects of the disease (Figure 16).

About 65.5% of the sample express ability and interest in communicating with others. However, this tendency is more noticeable in children (81.2%). Adolescents express this characteristic less, at a medium level (46.2%), but a part of them show a notorious expansiveness (38.5%), which may be due to a greater need to communicate, to unburden themselves at the moment (Figure 17).

There is a tendency towards motor immaturity, with 58.6 % showing fair muscle control and 13.8 % showing poor muscle control, which should not be associated with COVID, but with a deficit of stimulation (Figure 18). In addition, 31% show difficulties in attentional control (Figure 19).

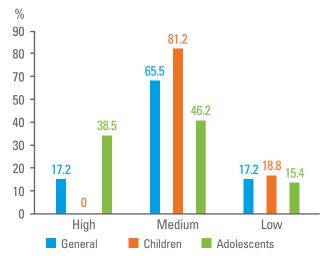


Figure 17. Comparison between children and adolescents in terms of expansiveness, capacity and interest to communicate (percentage).

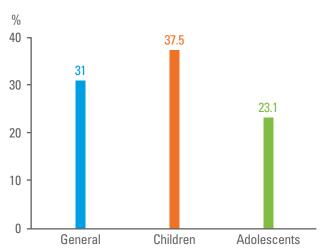


Figure 19. Comparison between children and adolescents in terms of difficulties in attentional control (percentage). **Source:** Authors.

Proportion, which is not often seen in children's drawing, appears in 41.4 % of the sample, suggesting possible rigidity of thought and lack of flexibility in the limits of relationships. Adolescents, in particular, are the ones driving this tendency. Likewise, 37.9% show reinforced strokes in drawing (again marked by adolescents and not by children), which is related to the presence of discomfort and the remembrance of experiences, which in this case may have to do with the disease (Figure 20).

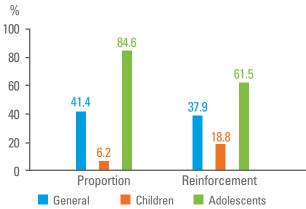


Figure 20. Comparison between children and adolescents in terms of proportion and reinforcement in drawings (percentage).

Source: Authors.

In general, the executions are of low quality, which speaks of little creativity and limited intellectual resources in these children and adolescents.

With respect to emotional processes, a strength found is that 96.6 % of the sample has emotional responses that are in line with reality and the stimuli received. The impact shown is in accordance with the experiences these children and adolescents have been through, and as they are given the possibility of having fun, socializing and enjoying pleasant experiences their overall mood should be improve.

However, the overall capacity to experience diverse and balanced emotions, both positive and negative, is only exhibited by two children who use polychromy (6.9%) and none of them are adolescents (Figure 21). This is justified by the strong emotional impact of the negative experiences associated with having been sick and because the period following medical discharge has seemingly not been highly gratifying either.

Emotional responses are poor or flat, expressed through the limited use of colour by 48.2% of the sample. This tendency is more prevalent among children, with 68.8 % of them showing this behaviour (Figure 21). This seems to be related to a lack of experiences to tell.

In spontaneous drawing, anxiety is the emotion that emerges most frequently, given the predominant use of blue (51.9%), which reaches 61.3% in adolescents. In addition, there is a 40.7% use of red, which reaches 50% in children, indicating aggressive states; green, which corresponds to agitated anxiety, is present in 33.3% of the sample, reaching 38.5% in adolescents, and the use of graphite, which indicates inhibition of emotional response is present in another 33.3%, which also amounts to 38.5% in adolescents (Figure 22).

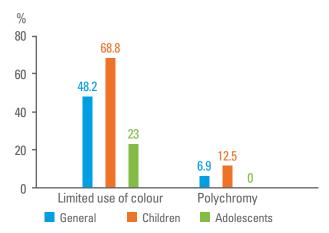


Figure 21. Comparison between children and adolescents in terms of limited use of colour and polychromy (percentage) **Source:** Authors.

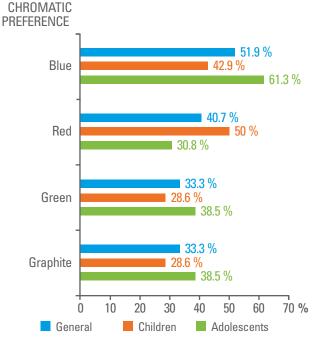


Figure 22. Comparison between children and adolescents in terms of most frequently used colours in spontaneous drawing (percentage).

Landscapes (seascapes, country or cityscapes) are the predominant themes in spontaneous drawing for 70.4% of the sample. The human figure only appears in 3.7% of cases, which indicates that socialization is not an area of great interest for the sample and is probably deficient. The low percentage of drawings representing the COVID-19 theme (3.7%) indicates that, despite the emotional impact, not all areas of development have been affected (Figure 23).

In the family area, only 28.6 % of the children express an adequate emotional balance. Based on the use of graphite, 80% show inhibition of emotional response. This reveals difficulties or obstacles in the child's communication with the family, and constitutes a risk factor for the favourable evolution of these children (Figure 24).

The family composition revealed by the children corresponds to real members of the household in 57.2% of the cases. About 21.4% of the sample made extended projections, showing the emotional importance of other family members with whom they do not live. On the other hand, 21.4 % draw families with members that do not exist or are not family members, which shows confusion or dissatisfaction with respect to the concept of family (Figure 25).

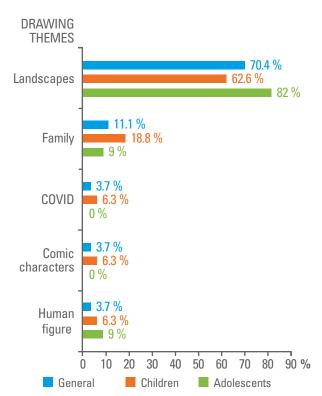


Figure 23. Comparison between children and adolescents in terms of spontaneous drawing themes (percentage). **Source:** Authors.

With respect to human figures, no negative indicators stand out, except for primitivism, which is present in 47.4% of the sample, indicating that intellectual resources are at the limit of chronological age in all these cases (Figure 26).

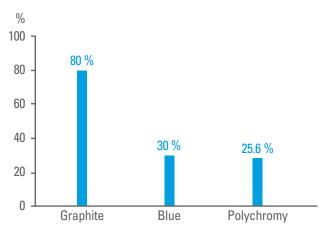


Figure 24. Most used colours in the family drawing test (percentage).

Source: Authors.

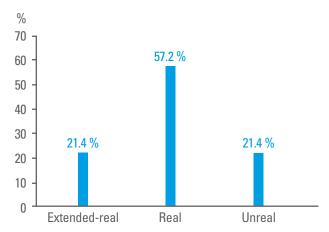


Figure 25. Family composition expressed by schoolchildren (percentage).

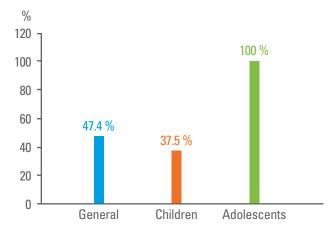


Figure 26. Comparison between children and adolescents in terms of primitivism in human figure drawing (percentage). **Source:** Authors.

As for the COVID-themed drawing test, which was only applied to children, 42.9% of them executed it with high personal involvement (Figure 27).

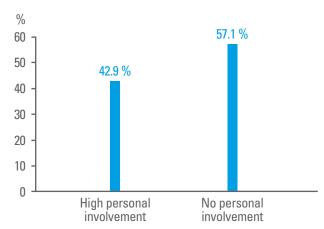


Figure 27. Personal involvement in thematic drawing on COVID-19 (percentage).

Source: Authors.

They draw themselves, alone or with their family members, in a hospital environment, providing vivid details of the medical equipment and procedures, which, in addition to the use of colour that reveals the presence of negative emotions or emotional inhibition, speaks of the high emotional impact of being sick.

The rest of the children (57.1 %) recall the disease in a way that entails a healthier relationship with the content. For example, they draw graphic representations of the virus, based on an image that is frequently shown on television, as well as protective measures and, in one case, a birthday of a sick child in the hospital.

One child (7.1 %) expresses a healthy emotional relationship with the COVID theme. Colour preferences of the remaining 13 children reflect negative moods and inhibition of emotional response, however high percentages are not shown because there were few children and they could only choose eight colours. Green and graphite were the predominant colours in 30.8% of the sample. (Figure 28)

In general, the psychographic techniques show regularities in the study sample. Retained intellectual processes, little creativity and intellectual resources, as well as motor immaturity can be observed. Socialization appears to be deficient, as a tendency. Emotional response tends to be inhibited in general and particularly in the family area. In addition, there is a predominance of negative emotions, such as anxiety and

aggressiveness. The subject of COVID in almost half of the children studied is associated with negative content and recall of personal experiences associated with hospitalization. There an evident emotional impact in a significant part of the sample, which does not affect cognitive processes or the general functioning of the children

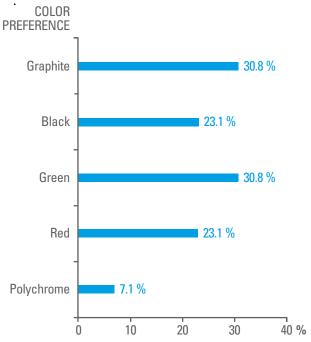


Figure 28. Most used colours in the COVID-themed drawing test (percentage).

Source: Authors.

Analysis of a thematic brief essay

The text composition was carried out by 16 adolescents. The predominant characteristics provided us with information that relates to the rest of the techniques applied.

The emotional response is inhibited in 87.5% of the cases studied. Seventy-five percent are functioning with less psychic energy and resoluteness than what is usual for their age, which is expressed also in the fluctuations of the emotional balance of the subjects (56 %) (Figure 29).

Communication is inhibited in 43.8 % of the cases studied, in contrast to the adequate extension of the compositions shown by the majority. We consider that writing and elaborating on the experience of having suffered from the disease allow them to unburden of their concerns and help them put their ideas about this recent negative experience in order. Thinking is clear in 62.5 % of the sample.

Fifty percent express excessive attachment to the mother, which is probably a mechanism to seek protection and security. This corresponds to the referenced high incidence of this behaviour (García et al., 2020). Signs of anxiety, distress and sudden loss of energy or spoiling of writing are also observed in key words such as isolation, COVID-19, treatment, pain, fear, family and explicit manifestations of suffering and depression (Figure 30).

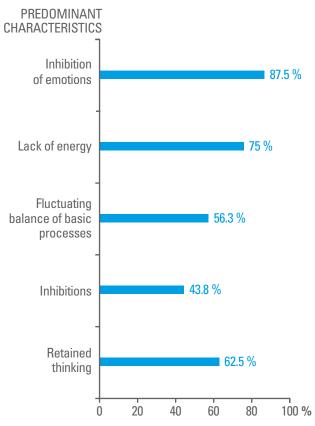


Figure 29. Predominant psychological characteristics expressed in the short essays (percentage).

Source: Authors.

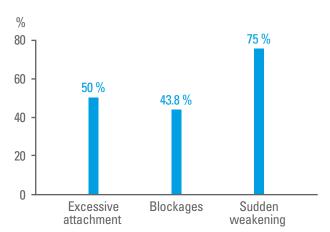


Figure 30. Anxiety and distress markers expressed in the short essays (percentage).

Source: Authors.

By analysing the general features, we see the main difficulties show high markers in the three areas of performance: personal, social and family. The difficulties in the latter area correspond to family functioning, which in some cases was tested by the circumstances of the disease of all cohabiting family members. In these cases, support had to be provided by family members who were not usually involved in these functions, in new and difficult circumstances. However, the characteristics found in the personal, social and family areas are stable, i.e., they are not reactive to the disease (Figure 31).

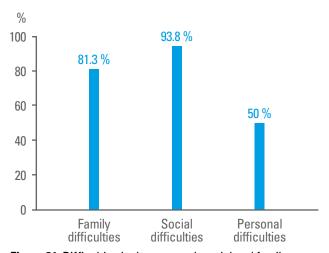


Figure 31. Difficulties in the personal, social and family areas as expressed in the short essays (percentage). **Source:** Authors.

The graphic traits which showed the most insufficient levels were the immunological one in the form weakness (43.8 %), which could be related to the effects of the disease, and difficulties in socialization (37.5 %) (Figure 32).

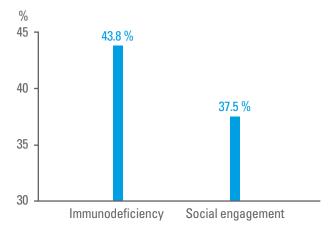


Figure 32.Graphic traits with the most insufficient levels, as expressed in the short essays. (percentage).

The contents identified in the text compositions are the following:

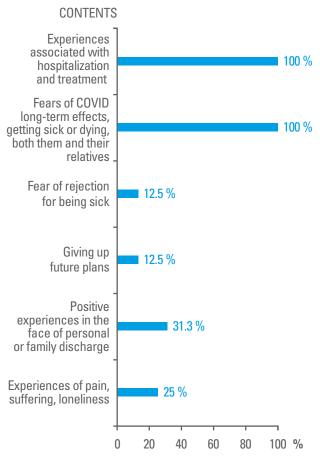


Figure 33. Contents addressed in the short essays. **Source:** Authors.

The content analysis is marked by feelings and experiences of suffering, pain, fear, uncertainty, and ideas of death, so that the text compositions are detailed and raw, with a burden of distress related not only to what has already happened, but also to the deep-rooted feeling that it could happen again.

Important long-term effects persist in some of them, such as loss of smell or taste, headaches and general discomfort, so negative experiences are constantly reactivated. This, together with the loss of close family members, fear of being rejected by friends to avoid contagion, or the aggravation of previous illnesses, completely justifies the excessive attachment, sadness, inhibition and lack of energy found in these children. Only a few of them express joy in the presence of medical staff and excitement about medical discharge.

Despite the high impact, the effects on the emotional sphere do not affect thinking or disorganize the

structure of the personality in formation. However, both children and their families require support and accompaniment in the recovery process.

Integrating analysis techniques

By integrating the comprehensive analysis of each case, it was possible to determine that 36 children have had some psychological impact as a consequence of having suffered from COVID-19, and they represent 81.8% of the sample. A total of 8 children show no impact and they account for 18.2 % of the sample, including three one-year-olds, one four-year-old, three nine-year-old and one eleven-year-old. (Figure 34).

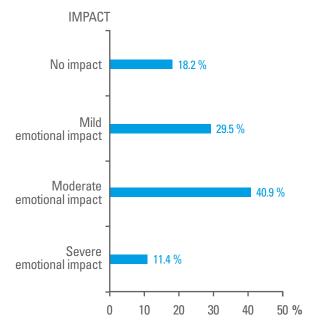


Figure 34. Level of emotional impact exhibited (percentage). **Source:** Authors.

According to the number, complexity and structuring of symptoms in the sample, the level of severity of emotional impact is distributed as follows:

- 29.5% Mild impact (36.1% of the total affected).
- 40.9 % Moderate impact (50% of the total affected).
- 11.4 % Severe impact (13.9 % of the total affected).

About 40% of caregivers do not show awareness of problem regarding the psychological impact on children. More than half (55.6%) of these children and adolescents are moderately affected and one is severely affected, however the adults in charge are not aware of it (Figure 35).

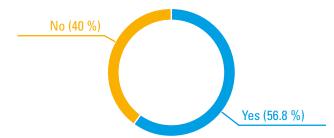


Figure 35. Caregiver awareness of children's emotional alterations.

Source: Authors.

El Gráfico 36 permite apreciar los niveles de afectación de la muestra estudiada, según los rangos de edad.

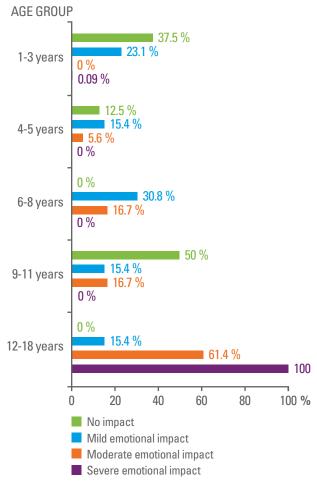


Figure 36. Level of emotional impact by age range. **Source:** Authors.

In general, adolescents are the most affected. None are free of symptoms or maladjustments. They present more moderate disorders than other groups and all cases with severe disorders are concentrated in this age group. This may be due to the fact that many of them are still experiencing physical discomfort. Because of their age, adolescents are more aware of the disease and the risk they face. Two of them have lost close re-

latives (they are in psychological mourning) and another one's mother is still in poor physical condition as a consequence of COVID. These three cases coincide with diagnoses of severe impact.

The psychological characteristics of the current performance of children in the sample were:

- Retained cognitive functions in most cases. Average to low intelligence and creativity, overall. Tendency toward motor immaturity. Tendency to cognitive rigidity in a good portion of adolescents. It is assumed that the stimulation of all developmental processes has not been optimal. This is not directly related to suffering from COVID-19.
- Socialization and fun do not emerge as contents associated with well-being in general. This may be influenced to some extent by the impossibility of carrying out this type of activities during all these months of pandemic. In the case of children, discomfort is noted in relation to interaction with other children and family members, due to relational conflicts. The latter should not be directly related having been sick with COVID. Therefore, it is considered that social skills and the need for socialization do not have a good level of development in this sample of children.
- Emotional impact is seen in 81.8% of the sample. The experiences associated with COVID have been intense and of a negative nature, so their effects remain, affecting the psychological well-being of these children and adolescents. Significantly, despite the emotional impact, no child becomes disorganized at the cognitive function level. That indicates resilient adaptive responses.
- Adolescents are the most emotionally affected.
 This must be related to a greater awareness of danger and risk to life than children.
- Given the importance of family support in the psychological recovery of children and adolescents, it is significant that 60% of the caregivers (mothers in the majority), do not seem to be aware of the psychological impact left by COVID-19 on their children. Forty-one percent of these caregivers report experiencing physical and/or psychological discomfort, which must affect their ability to provide care.
- Parents' lack of awareness of the problem, even when their children are in need of psychological support, is a common phenomenon faced by child and

adolescent mental health specialists. This research has been carried out by calling on the collaboration of the families, without them having voluntarily sought help. Hence, in a good part of the sample, there was no correspondence between the distress referred by the caregivers and the one detected in the direct assessment of children and adolescents.

 The family context that predominates in the sample is characterized by having a medium educational level, income levels below the average wage, housing in fair or poor conditions and considerable levels of overcrowding. A significant proportion of the families are single-parent families, although it is not possible to determine the place that fathers occupy in the lives of their children. Some of these families are likely to be at risk and/or socially disadvantaged, something that should be the subject of further research.

CONCLUSIONS

- The analysed sample included 44 children and adolescents, residents of Havana, who have suffered from the COVID-19. Findings indicate that 81.8% are emotionally affected, without exhibiting disorganized cognitive functions; overall they show a normal functioning with an average to low intellectual potential. The needs and competencies for socialization are at a deficient level, as a predominant characteristic in the sample.
- 60% of primary caregivers have no awareness of the psychological impact on children, which is
- likely to limit the support children and adolescents require to recover. Family contexts in most cases show characteristics that suggest the possibility of risk and/or social disadvantage factors, which should be ascertained in other researches in order to offer the necessary help.
- All cases studied should receive psychological support, regardless of parents' awareness of their children's problems. Making them aware of the issue is a fundamental part of the work required to protect the mental health of this group of children.

RECOMMENDATIONS

- To offer psychological support and follow-up to all families included in the study, both for the management of the children and adolescents and for the adults involved, many of whom are also convalescing from COVID -19.
- To carry out a social disadvantage and risk study in these families with the ultimate purpose of providing the support required for the comprehensive protection of children.

REFERENCES

- Díaz-Canel, M., & Núñez, J. (2020): Gestión Gubernamental y ciencia cubana en el enfrentamiento a la CO-VID-19. Revista Anales de la Academia de Ciencias de Cuba, 10(2).
- García Morey , A. (2013): Psicología Clínica Infantil. Su evaluación y diagnóstico. La Habana : Félix Varela.
- GARCÍA, A., CASTELLANOS, R., PÉREZ, D., & ÁLVAREZ, J. (2020): Aislamiento físico en los hogares a causa de la Covid-19: efectos psicológicos sobre niños y adolescentes cubanos. Revista cubana de psicología., 2(2), 51-68. http://www.psicocuba.uh.cu/index.php/PsicoCuba/article/view/27
- Íñiguez Rojas, L., Figueroa, E., Germán AM., Álvarez, ME., Somarriba, L., Herrada, A., Almora, L. (2020):

- Características epidemiológicas y espacialidad de la COVID-19 en niños y adolescentes. www.unicef. org/cuba/informes/caracteristicas-epidemiologicas-y-especialidad-de-la-covid-19-en-niños-y-adolescentes
- LLEDÓ, V., & ANDUIX, V. M. (1997): Escritura y salud. La grafoterapia, una escritura correcta para una salud perfecta. (1st ed.). España: Obelisco.
- Oficina Nacional de Estadística e Información. (2017): Anuario Estadístico de La Habana 2016. Recuperado el 27 de mayo de 2020, de http://www.onei.gob.cu/sites/default/files/anuario_est_provincial/00_la_habana.pdf

