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Trajectories of Parental Burnout in the First Year of the COVID-19 Pandemic

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Abstract

Parental burnout is a consequence of chronic stress associated with the role of a parent. Unfortunately, only a few longitudinal studies on parental burnout have been conducted so far, and none of them allows us to determine what risks the global Covid-19 virus pandemic has brought to parents. Three hundred seventy-six parents (67% female, 33% male) aged 19 to 30 years (M = 26.85, SD = 2.52) participated in a three-wave longitudinal study spanning 12 months, from the first weeks of the pandemic in Europe, through the peak of the disease six months later, and until the third wave of coronavirus in Europe began to die out in the spring of 2021. Latent class growth analysis (LGCA) were used to determine trajectories of change of parental burnout. Three different trajectories of parental burnout were identified: high and stable, low and stable, and average and increasing. Individual trajectories were associated with Covid-related stress, perfectionism, parental identity. The article discusses the implications of these findings for family research and for psychological practice focused on parental burnout.

Keywords: parental burnout, perfectionism, parental identity, stress, latent class growth analysis

In recent decades parenting has become a task whose demands often exceed the parent's capabilities (Mikolajczak & Roskam, 2020), what makes it more and more difficult for people to cope with one of the most important developmental tasks they face in their lifetime. When parenting becomes too much of a burden, a parent may experience chronic stress that can eventually lead to parental burnout (Mikolajczak & Roskam, 2018), a state of prolonged and severe exhaustion associated with the parenting role that leads to emotional distancing from children. Severe parental burnout is observed in up to 7–8 % of parents, especially from countries belonging to individualistic cultures where parents experience lower social support (Roskam et al., 2021). Parental burnout not only contributes to difficulties experienced by the parent themselves, such as depressive symptoms or suicidal thoughts, but also to child neglect and abuse (Mikolajczak & Roskam, 2020). Previous research has confirmed that over the course of one year, the severity of parental burnout is moderately stable (Mikolajczak, Gross, & Roskam, 2019), suggesting that at least some parents may experience changes in parental burnout over time. To date, however, no research has been conducted on the trajectories of change in parental burnout. The present study sought to fill these gaps by examining the trajectories of parental burnout during the first year of the Covid-19 pandemic and their correlates.

Studies have shown that the Covid-19 pandemic contributed to the increased parental stress and burden felt by parents, who found it difficult to balance work responsibilities and childcare in the face of lockdown (Prikhidko et al., 2020, Calvano et al., 2021). For this reason, it is plausible that the risk of parental burnout may also have increased during this period, especially in parents for whom a pandemic comes with heightened tension and anxiety increasing the emotional burden. On the other hand, some parents also point to the positive effects of the pandemic (Calvano et al., 2021), which also makes the decrease in parental burnout in some parents possible.

High levels of stress experienced during the pandemic and increased burnout may be associated with the presence of additional risk factors that hinder adaptation during this period. In the previous studies, the risk of parental burnout has been shown to be higher when a parent has low stress coping skills, high neuroticism, high perfectionism, low emotional intelligence, and poorly developed parental identity (Piotrowski, 2021; Sorkkila & Aunola, 2020; Szczygieł et al., 2020). The most probable mechanism for the impact of such characteristics on the risk of parental burnout is their effect on the onset and persistence of severe stress leading to exhaustion and ultimately to burnout. The present study focused on two such risk factors that are associated with both higher stress and parental burnout, namely perfectionism (a personality characteristic that has two main manifestations: more adaptive, i.e. perfectionistic strivings defined as setting high expectations for oneself, and highly maladaptive, i.e. perfectionistic concerns defined fear of failure, mistakes, and negative evaluation; Stoeber & Otto, 2006) and sense of parental identity (the degree of identification with parenting and the sense that parenting was a good choice for the individual; Piotrowski, 2018). Both of these characteristics have previously been indicated in longitudinal research as predictors of stress induced by pandemic (Molnar et al., 2021, Schrooyen et al., 2021). Although their associations with changes in parental burnout have not yet been studied, previous research suggests that during the pandemic both perfectionism and parental identity may be important for burnout risk. Perfectionism, especially perfectionistic concerns, is associated with emotional rather than task-oriented coping, cognitive strategies that sustain the stress response over time, and with rigidity of behavior and thinking and little flexibility to adapt to change (Stoeber & Otto, 2006), which may have increased stress in the face of pandemic-induced changes (Molnar et al., 2021) increasing emotional difficulties and exhaustion, and increasing the risk of burnout. In turn, a well-formed, stable parental identity co-occurs with more positive parenting experiences and greater satisfaction with parenting (Piotrowski, 2018), which makes parents better able to cope

with the stresses they are exposed to during the pandemic (Schrooyen et al., 2021). Thus, it can be hypothesized that parents with well-formed parental identity will be less likely to experience an increase in parental burnout during the pandemic.

Research Problem and Hypotheses

The present study aimed to analyze the trajectories of changes in parental burnout during the first year of the pandemic and their associations with Covid-related stress, perfectionism, and sense of parental identity. In the absence of previous research on trajectories of parental burnout, the existence of different trajectories of change was considered plausible, e.g., the existence of parents who experienced an increase in burnout and those whose burnout levels did not change, also the disclosure of a group of parents experiencing a decrease in parental burnout during the coronavirus pandemic was not excluded, as some parents may also have experienced positive changes as a result of the restrictions caused by the pandemic (Calvano et al., 2021). Further, it was hypothesized that an increase in parental burnout during the pandemic was most likely to occur among parents burdened by risk factors, including experiencing severe stress related to the Covid-19, having strong perfectionistic concerns, and having a poorly formed parental identity.

Methods

Participants, Procedure, and Attrition Analysis

The study began in April 2020 by surveying a national sample of emerging adult parents (T1 $N = 1275$) who were members of a nationwide research panel. All were citizens of Poland. To participate in the study, parents had to have at least one child and be maximum 30 years old (the age restriction was due to a desire to look at the functioning of the emerging adult parents, who are underrepresented in parental burnout research; emerging adulthood is also a time of intense development of a sense of identity, which was one of the areas of interest in the present

study). Due to the pandemic that reached Poland in March 2020 and the onset of lockdown, it was decided to re-contact the participants of the first measurement and invite them to participate in two more measurements (in October 2020 and April 2021) to be able to estimate the potential impact of the pandemic on changes in parental adjustment. The study was approved by the Ethics Committee of [blinded].

Five hundred fifty-seven persons accepted the invitation to the second measurement (43.5% of the original sample; T2 N = 557). Out of these, 337 people also participated in the third measurement (T3). To assess the pattern of missing data, the Little's MCAR test was conducted with data from measurements 1-3. MCAR test was found to be statistically insignificant, suggesting that the missing data is missing completely at random. Closer analysis reveals that women (60% at T1 vs. 67% at T1–T3) and married individuals (50% at T1 vs. 62% at T1–T3) were slightly more likely to choose to continue the study. A small but statistically significant age difference was also observed between those who dropped out after the first measurement (M = 26.10, SD = 2.55 years) and those who continued to participate in the study (M = 26.85, SD = 2.52). Given that the structure of the sample that took part in all measurements was very similar to the original sample, it was decided that analyses could be conducted on complete data (N = 337), so that it was not necessary to estimate a large amount of missing data, which could lead to incorrect estimates of the tested models. Detailed characteristics of the sample are presented in Table 1.

Table 1 here

Measures

Parental Burnout

Participants completed the 23-item Parental Burnout Assessment (Roskam et al., 2018; Szczygieł et al., 2020). The scale allows the measurement of different manifestations of parental

burnout (e.g., *I feel completely run down by my role as a parent*) and allows for an overall score that was used in the analyses presented here. Participants rated each statement on a seven-point Likert scale, ranging from 0 = *never* to 6 = *daily*. Cronbach's alpha was .98, .98, and .98, respectively.

Covid-Related Stress

Two of the five subscales of the Covid Stress Scales (Taylor et al., 2020) were used: the Danger and contamination fears scale assessed the fear of infection of oneself and family members and the sense of danger from the virus (six items, e.g., *I am worried that I can't keep my family safe from the virus*; 0 = *not at all* to 4 = *extremely*) and the Traumatic stress symptoms scale assessed traumatic stress symptoms following a pandemic (six items, e.g., *Reminders of the virus caused me to have physical reactions, such as sweating or a pounding heart*; 0 = *never* to 4 = *almost always*). The two scales used were chosen because they correlate most closely with overall levels of anxiety, depressive symptoms, and distress (Taylor et al., 2020). Because the central European pandemic was just beginning at the time of measurement 1 (April 2020), virus-induced anxiety was not the focus of the study. Both subscales of the Covid Stress Scales were used only in measures 2 and 3. Cronbach's alpha was: Danger and contamination fears .92, .93, Traumatic stress symptoms .96, .97, respectively.

Perfectionism

The three subscales of the Frost Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990; Piotrowski & Bojanowska, 2019) was used to measure participants' perfectionism: Personal Standards (seven items; e.g., *If I do not set the highest standards for myself, I am likely to end up a second-rate person*), which was taken as an indicator of perfectionistic strivings Stoeber & Otto, 2006), and Concern over Mistakes (nine items, e.g., *If I fail at work/school, I am a failure as a person*) and Doubting of Actions (four items, e.g., *Even when I do something*

very carefully, I often feel that it is not quite done right), which together form an index of perfectionistic concerns; Stoeber & Otto, 2006). The items were rated on a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Cronbach's alpha for the perfectionistic strivings dimension was .82, .86, and .82, and perfectionistic concerns was .91, .93, and .93, respectively. The three other FMPS subscales were not included because their theoretical validity is questioned (Piotrowski & Bojanowska, 2019).

Parental Identity

The sense of parental identity was measured using the Utrecht-Management of Identity Commitments Scale: Parental Identity (Crocetti et al., 2008; Piotrowski, 2018, 2020), which allows for the measurement of parental identity, understood as the degree of identification with parenthood and the search for in-depth information on parenting. The scale consists of 13 items and assesses the severity of three identity processes: Commitment, which indicates the level of engagement in, and identification with, the role of a parent (five items; e.g., *Being a parent gives me self-confidence*); In-depth exploration, which measures the extent to which parents reflect on their current parental commitment and search for information on parenting and children (five items; e.g., *I make a lot of effort to keep finding out new things about my child/children*); and Reconsideration of commitment, which measures the extent to which parents think that parenthood does not fit their needs and expectations; it is the main indicator of difficulty in forming a stable sense of identity (three items; e.g., *I often think that not having a child/children would have made my life more interesting*). Cronbach's alpha was: Commitment .92, .91, .93, In-depth exploration .76, .77, .78, and Reconsideration of commitment .92, .93, .92, respectively.

Statistical Analysis

Since the study participants had to answer all questions (forced choice), the database did not contain missing values. As a first step, correlation analysis between variables was performed. Next, the trajectories of change of parental burnout were distinguished using latent class growth analysis (LCGA) with Mplus 7.3 (Muthén & Muthén, 1998-2012) on the total score of the PBA questionnaire in measures T1–T3. In accordance with the LCGA method, the variance of latent slope and intercept were fixed to zero within class, and allowed to vary only across classes. Because of the deviation of the multivariate distribution from the normal distribution, the estimation of the parameters was performed using full maximum likelihood with robust standard errors (MLR). Although there is no clear indication of the sample size required for LCGA, Kim's (2012) analyses indicate that approximately 200-300 individuals are sufficient when separating 2-6 classes with a small number of measures (e.g., 4). In light of these recommendations, the study sample size can be considered adequate. In the analysis, two, three, four, and five latent classes were extracted, and then the optimal solution was selected. For this purpose, the following indices (Muthén & Muthén, 2000) were used: the Bayesian Information Criterion (BIC) should be as low as possible, with the addition of another class leading to a minimum 10-point decrease in BIC for the change to be defined as significant; the Bootstrapped Likelihood Ratio Test (BLRT), whose significant value ($p < .05$) indicates that adding another class allowed for an improved fit; the Lo-Mendell-Rubin adjusted likelihood ratio test (LMR), whose significant result indicates that a given solution is better fitted than one with one less class; Entropy, which is a general indicator of classification accuracy and whose higher value indicates greater model validity. Finally, the issues of parsimony, interpretability, and theoretical justification are very important factors in determining the final solution (Jung & Wickrama, 2008). Since extracting more groups usually improves the statistical parameters, it is important to balance the statistical parameters with the number and size of classes (solutions with classes smaller than 5% of the sample are usually considered too fragmented) to obtain a

meaningful solution. In conducting the LCGA, the R3STEP procedure (Asparouhov & Muthén, 2013) available in Mplus 7 was used. This procedure uses multinomial logistic regression to determine whether the intensity of auxiliary variables (in the case of this study, these were Covid stress, perfectionism, and parental identity dimensions) decreases/increases the likelihood that an individual belongs to a particular class identified in the LCGA. Additionally, with the *Chi*-square test and analysis of variance (MANOVA) it was verified whether membership in the identified latent classes was associated with contextual sociodemographic variables. This study was not preregistered. If the manuscript is accepted for publication, the data, syntax and methods will be made available on the OSF website.

Results

Correlations Between Study Variables

Correlations between the same variables at T1/T2 and T3 indicate that most of the study characteristics were moderately stable over time (Table 2). In line with predictions, parental burnout correlated positively with Covid-19-induced stress, but only with traumatic stress. Parental burnout was also positively related to perfectionistic concerns and to reconsideration of commitment. For covid-related stress, we found that both the danger and trauma dimensions positively correlated with the two perfectionism dimensions, and covid trauma also correlated positively with reconsideration of commitment, which is in line with considering perfectionism and identity as important predictors of the coping process.

Table 2 here

Trajectories of Parental Burnout

Table 3 shows the statistical indicators that were used in deciding the optimal number of latent classes. The solution consisting of three classes was judged to be better than that consisting of two classes based on the lower BIC value and the BLRT and LMR values.

Admittedly, the Entropy values for two classes were higher, but the addition of a third class revealed a new group that was distinct from the others. Increasing the number of latent classes to four led to a further decrease in BIC, but in this solution the two classes were characterized by similar values (C1: intercept = 79.62 with insignificant slope, C2: intercept = 75.07 with insignificant slope), so it was a violation of the principle of economic separation of classes. Additionally, the LMR value indicated that both the solution with four and five classes no longer improved the fit. The five-class solution also contained three classes with small number of individuals (3%, 5%, and 9%), indicating that they were too fragmented which complicates the interpretability of the results (Muthén & Muthén, 2000). In light of all the data collected, the solution consisting of three latent classes was the most optimal solution and was considered the final result.

Table 3 here

Table 4 shows the intercept and slope values for parental burnout in each of the identified latent classes. Parents in Class 1 (63%) were characterized by low levels of parental burnout that did not change significantly between T1 and T3 measurements; Class 2 (7%) included parents who were characterized by high initial levels of parental burnout that did not change between T1 and T3 measurements; Class 3 (30%) grouped parents who were characterized by moderate parental burnout at the beginning of the study that increased significantly between T1 and T3 measurements. Figure 1 shows the observed values of parental burnout between T1 and T3 measurements for each latent class.

Table 4 here

The results of the R3STEP analysis are presented in Table 5. The results revealed that the probability of participants belonging to classes 2 (high and stable parental burnout) and 3 (average and increasing parental burnout) was predicted by the same characteristics. A parent

was more likely to be in C2 or C3 classes when experiencing severe traumatic stress from the Covid, when having higher levels of perfectionistic concerns, and when their sense of parental identity was unstable and insecure, as reflected in lower commitment, higher reconsideration of commitment, and less motivation to seek additional information about parenting. In contrast, membership in different trajectories was not related to the level of covid-danger and the intensity of perfectionistic strivings. The difference between C2 and C3, on the other hand, was that the severity of difficulty in forming a stable parental identity was even higher in the former group, which was also confirmed in additional analyses (MANOVA) comparing the mean differences in each class (See supplementary table).

Table 5 here

Differences Among Trajectories in Terms of Sociodemographic Variables

The identified latent classes were then compared with respect to the distribution of gender, marital status, education, assessment of financial situation, having a child (one or more) under five years of age, having a child with a chronic illness or disability. *Chi*-square test analysis revealed no significant differences with respect to any of these variables. In addition, the latent classes did not differ by parental age, average age of children, or the degree to which illness or disability limited the child's ability as judged by the parent (from 1-*to a very low degree*, to 5-*to a very high degree*).

Discussion

The present study was the first to examine the trajectories of change in parental burnout during the Covid pandemic. The results are consistent with previous reports of the burden the pandemic brought on parents (Calvano et al., 2021) and suggest that many of emerging adult parents may have experienced an increase in parental burnout.

Longitudinal Trajectories of Parental Burnout During the Covid-19 Pandemic

Since the present study is the first to examine trajectories of change in parental burnout, the hypotheses were exploratory rather than confirmatory. It was anticipated that it would be possible to observe both stable trajectories and trajectories of change, both increasing and decreasing. The findings revealed that for most parents, no change in parental burnout was observed. For 63% of parents, the level of parental burnout had remained consistently low, showing that most parents managed to "get through the pandemic" in such a way that their level of exhaustion did not increase. The degree of burnout did not change either in the group of 7% who were already severely burned out before the onset of the pandemic (the range of 96–98 on the PBA scale). Severely burned out parents have little involvement in caregiving and tend to neglect their children (Mikolajczak & Roskam, 2020). Thus, the more frequent presence of children at home due to homeschooling did not necessarily lead to an increase in parental exhaustion for those parents who may have undertaken an isolation strategy. Alternatively, this group of parents may have already reached such a high level of parental burnout that even a global, long-term threat can no longer exacerbate. However, it is important to remember that regardless of the lack of further increase in burnout, it is this group of parents who are most vulnerable to the negative consequences of parental burnout.

Somewhat surprisingly, we found that those who experienced the greatest increase in parental burnout were parents who were characterized as having moderately severe burnout at the beginning of the pandemic. This group accounted for 30% of the study sample, showing that up to one in three emerging adult parents over the past year could have experienced a marked increase in parental burnout, coming dangerously close to a state of severe exhaustion. The increase in parental burnout in such a large group of parents may explain the observations of other researchers, such as the increase in child abuse during the pandemic (Humphreys et al., 2020). No group of parents who experienced a decrease in parental burnout during the pandemic period was observed in the study sample. This may be related to the effect described by Calvano

et al. (2021) that the positive effects of the pandemic are observed mainly by the best-adjusted parents, who are already characterized by low levels of parental burnout, so there is little room for further reductions in their severity.

Covid-Related Stress and Parental Burnout During the Covid-19 Pandemic

Previous studies have shown that low stress coping skills increase the risk of parental burnout (Mikolajczak & Roskam, 2018). For this reason, it has been predicted that the increase in parental burnout may be related to the increased stress caused by the pandemic. The results partially supported this hypothesis with respect to Covid-Trauma, for the C3 group. It turned out, however, that among the most burned-out parents (C2), traumatic stress caused by the pandemic was not associated with its further increase. Probably for the reasons described above. Parents with low burnout (C1), who are better able to cope with stress (Mikolajczak & Roskam, 2018), did not develop as severe traumatic stress symptoms as parents in the other two classes. It appears that for the most vulnerable and burdened groups of parents, namely those severely burned out and at risk for burnout, the pandemic brought the additional burden of acute coronavirus stress. This is another risk factor observed in this group (Mikolajczak & Roskam, 2018), which threatens to further exacerbate their emotional and social difficulties. The lack of differences between classes in Covid-Danger may be due to the fact that in the first year of the pandemic, the stress of infection may have been quite common regardless of the traits possessed. Further results, on perfectionism and parental identity, suggest that both severe Covid stress and increased parental burnout in groups C2 and C3 might have common determinants, i.e., the presence of personality risk factors.

Perfectionism and parental burnout during the Covid-19 pandemic

In line with much research (Stoeber & Otto, 2006), results revealed that perfectionistic strivings (more adaptive form of perfectionism) did not correlate with parental burnout. It is the severity of perfectionistic concerns (maladaptive aspect of perfectionism) that were associated

with more severe Covid-related stress, including traumatic stress, but most importantly with increased burnout during the pandemic period (C3), which confirms the hypothesis. The results are consistent with other research on maladaptive perfectionism and stress (Stoeber & Otto, 2006), parental burnout (Sorkkila & Aunola, 2020) and adaptation during a pandemic (Molnar et al., 2021). As demonstrated by Molnar et al. (2021), high perfectionism before the onset of the pandemic, was associated with poorer adaptation during lockdown. The results of the present study suggest that an increase in parental burnout may have been another of the effects of maladaptive perfectionism during the pandemic.

Sense of Parental Identity and Parental Burnout During the Covid-19 Pandemic

It was predicted that parents with poorly formed parental identity may experience an increase in parental burnout during the pandemic period. As with previous cases, this hypothesis was partially confirmed, for the C3 group. Previous longitudinal studies have already revealed that a stable sense of parental identity is a factor that can protect parents from the negative effects of the pandemic (Schrooyen et al., 2021). Unfortunately, parents whose burnout was high (C2) or increased (C3) were already lacked a stable and clear parental identity at the beginning of the pandemic and they could not use it as a resource in dealing with the demands of a lockdown. This can be seen in the form of more severe stress in these groups. Although, compared to the C2 group, parents with an increase in burnout (C3) were characterized by higher commitment, exploration, and lower reconsideration, demonstrating that their sense of parental identity was somewhat better developed, it appears that this did not provide a sufficient buffer against stress and burnout. In turn, stable and low parental burnout during the pandemic year co-occurred with strong identity commitment and identification with the parental role, but also adaptive exploration, that is, seeking new information about oneself as a parent. This flexible and reflective attitude of those with a well-formed identity is considered an important resource in coping with emerging challenges (Marcia, 1966), which may have also supported

these parents in adjusting to new demands and avoiding an increase in burnout (Schrooyen et al., 2021).

The Importance of Sociodemographic Factors in the Increase in Parental Burnout Severity During the Covid-19 Pandemic

In line with other research (Mikolajczak et al., 2018), we found that sociodemographic factors were not at all associated with the trajectories of parental burnout. The presented study, once again, proves that in order to understand the risk of parental burnout among parents, we must, first and foremost, look at the individual characteristics of parents.

Practical Implications

The findings from this study may be applicable to planning support programs for parents at risk of burnout. Previous research on interventions aimed at directly reducing parental burnout has shown that it is an effective tool for supporting parents (Brianda et al., 2020). Given that in the study group, nearly 40% of parents either experienced very high burnout or their burnout was increasing, it is advisable for governments to initiate extensive support programs for parents who are burned out and at risk of burnout. The results on the role of perfectionism and parental identity suggest two further directions. On the one hand, programs aimed directly at decreasing parental burnout should also include activities aimed at decreasing perfectionistic concerns (research shows that this is a modifiable trait; Kearns et al., 2007) and developing a sense of parental identity (also, a sense of identity is a modifiable trait in the course of psychological interventions; Meca et al., 2014). On the other hand, lowering parental burnout can also be carried out indirectly, by acting on its determinants. It seems that even if parental burnout is not the direct target of the intervention, support leading to a decrease in perfectionism and parental identity development may eventually lead to a decrease in parental burnout as well. Another area that will require effort by medical and psychological services is helping parents cope with the effects of prolonged stress, which often takes the form of traumatic stress. It is

advisable to begin a large-scale, population-based study of traumatic stress during a pandemic and to implement nationwide support mechanisms for citizens.

Limitations and Further Research Directions

Although the presented study provided new observations, its findings must be considered in the context of certain limitations. First, the end of the study (April 2021) does not mean the end of the Covid-19 pandemic. Further longitudinal studies are needed to allow us to observe the trajectory of parental burnout in the months and years ahead. Second, the study was based on only one source of information, the parent, and included only self-report methods. Future studies should focus on examining couples and even entire families, including children, to observe the dynamic relationship between parental burnout and family system functioning. Third, the attrition of participants between T1 and T3 was quite high, making it impossible to determine the trajectory of change for many parents. Future studies with representative samples should limit attrition of the sample. Fourth, this was the first study to examine the trajectories of change in parental burnout, making it impossible to compare the results with other observations, particularly from the pre-pandemic period. This leads to the need to verify the data presented in future studies. Certainly, it is important to remember that these types of correlational studies do not conclusively establish that the increase in C3 group is due to pandemic-induced changes and lack of coping resources. Further research on parental burnout conducted during the pandemic period should take this into account and provide further information on this topic.

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Table 1

Sociodemographic characteristics of the sample (data from the first measurement)

Socio-demographic characteristics of the sample (T1)		
Gender		
Women	*n* = 251	66.8%
Men	*n* = 125	33.2%
Participants' age	*M* = 26.85	*SD* = 2.52
Marital status		
Married	*n* = 232	61.7%
Informal relationship	*n* = 119	31.6%
Single	*n* = 25	6.6%
Education		
Primary education	*n* = 12	3.2%
Basic vocational	*n* = 20	5.3%
Secondary education	*n* = 168	44.7%
Higher education	*n* = 176	46.8%
Financial situation		
No financial difficulties	*n* = 152	40.4%
Minor financial difficulties	*n* = 199	52.9%
Major financial difficulties	*n* = 25	6.6%
Child's chronic illness/disability		
No	*n* = 298	79.3%
Yes	*n* = 78	20.7%
At least one child under 5 years of age		

Yes	*n* = 326	86.7%
No	*n* = 50	13.3%
Number of children		
One	*n* = 231	61.4%
Two	*n* = 125	33.2%
Three	*n* = 18	4.8%
Four	*n* = 2	0.5%
Mean age of children	*M* = 3.16	*SD* = 2.57

Table 2

Correlations Between Studied Variables in T1 and T3

	T3							
	1	2	3	4	5	6	7	8
1. Parental burnout T1	**.63*** **	.02	.25***	04	.35***	-.38***	-.21***	.42***
2. Covid danger T2		**.60*** **	.36***	.22***	.19***	-.02	.08	.01
3. Covid trauma T2			**.67*** **	.27***	.38***	.05	-.02	.20***
4. Perfectionistic strivings T1				**.66*** **	.27***	.10	.20***	.12*
5. Perfectionistic concerns T1					**.59*** **	-.15**	-.02	.30***
6. Commitment (U-MICS) T1						**.66*** **	.35***	-.35***
7. In-depth exploration (U-MICS) T1							**.49*** **	-.27***
8. Reconsideration of commitment (U-MICS) T1								**.60*** **

* $p < .05$, ** $p < .01$, *** $p < .001$

Note: Due to the large amount of data (11 variables in T1 and 13 variables in T2–T3), only the correlations between the T1 and T3 measures and, for the Covid Stress Scale variables, between T2 and T3 are presented in this article. Complete correlation tables are available from the author.

Table 3

Latent Class Growth Analysis (LCGA) on Parental Burnout

					Group prevalence (%)				
Solution	BIC	BLRT	LMR	Entropy	C1	C2	C3	C4	C5
2-class	10662.590	-5539.63, $p < .001$	$p < .001$	.90	35	65			
3-class	**10622.113**	**- 5307.57,** $p < .001$	$\boldsymbol{p = .07}$	**.88**	**63**	**7**	**30**		
4-class	10579.265	-5278.44, $p < .001$	$p = .36$	.88	22	5	14	59	
5-class	10533.330	-5249.36, $p < .001$	$p = .14$	.92	3	5	9	23	59

BIC - Bayesian Information Criterion, BLRT - Bootstrapped Likelihood Ratio Test, LMR - Lo-Mendell-Rubin adjusted likelihood ratio test

Table 4

Mean Intercepts and Slopes of Latent Class Growth Analysis

Parental burning trajectory classes	Mean intercept	Mean slope
Class 1 (low and stable)	20.13***	-1.37 *ns*
Class 2 (high and stable)	95.02***	-.30 *ns*
Class 3 (average and increasing)	53.81***	7.95**

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5

Covid-related stress, perfectionism, and parental identity as predictors of latent class membership

	Class 1 (high and decreasing) versus Class 2 (low and increasing)		Low and stable (C1) versus Average and Increasing (C3)		High and stable (C2) versus Average and increasing (C3)	
	β	SE	*β*	SE	*β*	SE
Covid danger T2	.40	.23	.10	.12	-.30	.25
Covid trauma T2	.73**	.26	.64***	.13	- .09	.29
Perfectionistic strivings T1	.25	.36	.10	.18	- .15	.40
Perfectionistic concerns T1	1.81***	.41	1.08***	.20	- .73	.41
Commitment (U-MICS) T1	- 1.55***	.34	- .89***	.18	.66	.34
In-depth exploration (U-MICS) T1	- 1.23***	.44	- 1.16***	.24	.07	.49
Reconsideration of commitment (U-MICS) T1	1.46***	.21	.94***	.16	- .52**	.17

* $p < 0.05$, ** $p < 0.01$, *** $p < .001$

Note: Regression coefficients are unstandardized. All values are logistic regression coefficients estimated by the R3STEP procedure. Positive values indicate that higher intensity of a variable increases the probability of membership in the second class in the pair, negative values indicate that higher intensity of a variable increases the probability of membership in the first class in the pair. As the same variables in measures 2 and 3 yielded the same results, for clarity, the table shows only how the severity of the predictors at the beginning of the study (T1) was associated with parental burnout class membership. For Covid stress, which was measured at T2 and T3, the result for the first measurement is shown. Full data can be obtained from the author.

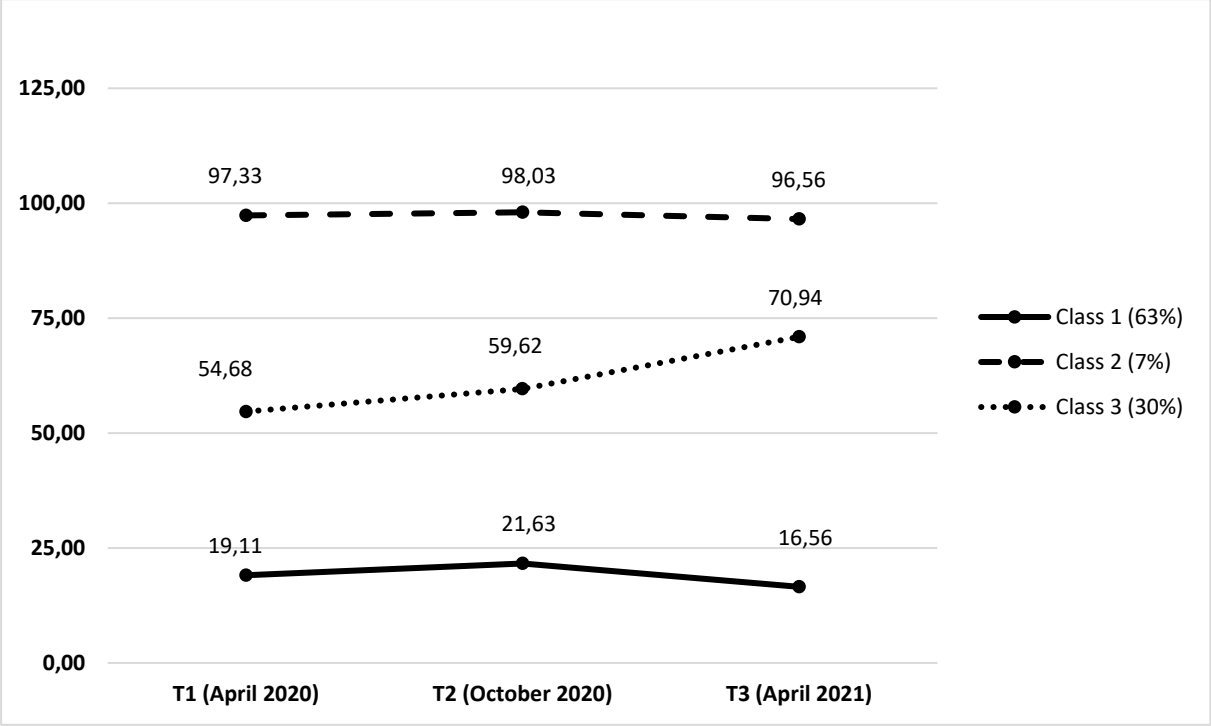

Figure 1

Parental Burnout Scores from T1 to T3 for the Three Classes

Note: The PBA score takes values from 0 to 138 points; 92 points is considered the cutoff point for severe parental burnout.

Supplementary table

Mean Differences Between Different Classes on Perfectionism, Parental Identity, and Covid Danger and Covid Trauma

	Class 1 low and stable *M* (*SD*)	Class 2 high and stable *M* (*SD*)	Class 3 average and increasing *M* (*SD*)	*F*	eta^2
Covid danger T2	3.17 (1.03)	3.50 (.86)	3.27 (.89)	1.56 *ns*	.01
Covid danger T3	2.99 (1.09)	3.32 (.93)	3.07 (.92)	1.38 *ns*	.01
Covid trauma T2	1.79 (.92)[a]	2.51 (1.32)[b]	2.41 (1.02)[b]	18.85***	.09
Covid trauma T3	1.70 (.91)[a]	2.62 (1.20)[b]	2.48 (1.10)[b]	29.24***	.14
Perfectionistic strivings T1	3.42 (.72)	3.53 (.75)	3.47 (.71)	.42 *ns*	< .01
Perfectionistic strivings T2	3.40 (.76)	3.56 (.75)	3.54 (.79)	1.45 *ns*	< .01
Perfectionistic strivings T3	3.39 (.73)	3.57 (.77)	3.53 (.68)	1.98 *ns*	01
Perfectionistic concerns T1	2.66 (.79)[a]	3.54 (.76)[b]	3.22 (.67)[b]	32.68***	.15
Perfectionistic concerns T2	2.79 (.85)[a]	3.63 (.88)[b]	3.33 (.76)[b]	23.88***	.11

Perfectionistic concerns T3	2.67 (.83)[a]	3.64 (.96)[b]	3.25 (.73)[b]	36.91***	.17
Commitment (U-MICS) T1	4.06 (.75)[a]	3.08 (.92)[b]	3.51 (.87)[c]	30.83***	.14
Commitment (U-MICS) T2	4.02 (.71)[a]	3.35 (.93)[b]	3.43 (.73)[c]	30.05***	.14
Commitment (U-MICS) T3	3.99 (.74)[a]	2.96 (.95)[b]	3.31 (.85)[c]	41.32***	.18
In-depth exploration (U-MICS) T1	4.16 (.56)[a]	3.73 (.68)[b]	3.77 (.65)[b]	19.93***	.10
In-depth exploration (U-MICS) T2	4.11 (.56)[a]	4.00 (.52)[a,b]	3.77 (.68)[b]	12.40***	.06
In-depth exploration (U-MICS) T3	4.09 (.57)[a]	3.80 (.57)[b]	3.75 (.66)[b]	14.03***	.07
Reconsideration of commitment (U-MICS) T1	1.63 (.92)[a]	3.30 (.93)[b]	2.57 (1.14)[c]	57.52***	.24
Reconsideration of commitment (U-MICS) T2	1.78 (1.07)[a]	3.28 (.95)[b]	2.77 (1.10)[c]	47.73***	.20
Reconsideration of commitment (U-MICS) T3	1.57 (.86)[a]	3.19 (1.10)[b]	2.74 (1.06)[c]	80.53***	.30

* $p < .05$, ** $p < .01$, *** $p < .001$; mean values with different indices differ significantly (*post hoc* tests: Tukey HSD); *SD* values are in parentheses