
Changes in the play lives of college students during the early COVID-19 pandemic lockdown.

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ARTICLE INFO

Keywords:

Play
Adult play
Play deprivation
Emerging adulthood
Self-determination theory
COVID-19 pandemic

ABSTRACT

In the current study, we explored changes in the lived play experiences of college students as they were sent home in March 2020 in response to the growing COVID-19 pandemic, and the impacts of those play changes upon their daily lives, relationships, and well-being. Undergraduates ($N = 71$) from a public university near New York City - the epicentre of the pandemic in the United States at that time - completed an open-ended questionnaire about their play experiences before versus after lockdown. Data were analyzed using template analysis to develop a hierarchical outline of thematic codes. Participant responses revealed strikingly varied experiences in their play lives as a result of the lockdown. While some students experienced deep losses in what and with whom they played, for others the transition offered opportunities for discovery (or rediscovery) of play activities or a reprioritization of play in their lives. Still other students found ways to maintain their prior ways of playing with minor disruption. We will discuss the implications of the current findings for the role and importance of play not only during the pandemic, but also in the context of emerging adulthood and broader human need satisfaction.

Although research on adult play is still scant relative to research on play in children and non-human animals (Perone & Göncü, 2014; Van Vleet & Feeney, 2015), there is growing evidence that when adults engage in regular play, they experience meaningful social connection with others and reap emotional and mental health benefits. For example, same-sex friends reported greater closeness when they engaged in a wider array of play as well as more play overall (Baxter, 1992). Aune and Wong (2002) found that, among romantic partners, expression of playfulness within the relationship predicted relationship satisfaction, and this association was mediated by positive emotion. DesCamp and Thomas (1993) found that active physical play buffered the effects of strain and stress among nurses, while Ocobock et al. (2020) discovered an association between absorption in playful improv activities and lower cortisol levels. Even a single, brief period of play in a laboratory setting can increase positive mood and feelings of subjective vitality while decreasing negative emotions and markers of stress (e.g., Maynard et al., 2020; Russoniello et al., 2009). Given this accumulating

evidence for the importance of play for adult well-being, what happens when a young adult's ability to play in their preferred way is suddenly upended by forces outside their control? Unfortunately, there is little existing research on the experiences and effects of play disruption at any stage of adulthood.

In the spring of 2020, the growing COVID-19 public health crisis forced schools and businesses in many countries worldwide to shut down, and many governments imposed restrictions on public social gatherings. Although there has been much discussion about the negative effects of these necessary measures upon the development and well-being of children (e.g. de Figueiredo et al., 2021), quality of life for adults (beyond the obvious and serious implications for health and financial stability) has potentially suffered as well. Many shared public spaces where adult play regularly happens were suddenly unavailable, such as movie theatres, bars, gyms, bowling alleys, gaming stores, and even nature parks and trails. As a result, adults who frequented these sites, in addition to those who gathered with friends in private homes for play-centric social gatherings (e.g., game nights), were almost certainly unable to continue to engage in play as before.

College and university students worldwide experienced particularly sudden and drastic changes in their daily lives. Most quickly found themselves completing all of their coursework remotely from their original homes rather than taking classes in person and often living in dormitories or off-campus apartments nearby (Kecojevic et al., 2020). Many students who were employed either lost their jobs or experienced reduced hours (Birmingham et al., 2021; Lancaster & Arango, 2021), while others likely became "essential workers," interacting with the public and managing the stress of exposure to a deadly virus. The impacts of the spreading pandemic on university students potentially extended beyond their academic and work lives to also influence their play. In addition to the closing of play spaces mentioned above (including university campuses themselves), the closing of campuses and returning to original homes mean that students were also separated from play partners such as close friends, significant others, and fellow members of student organizations. As such, the patterns of social interaction with others and engagement in leisure and play activities were likely either abruptly halted or altered, and such changes had the potential to significantly affect the daily lives, emotional states, meanings, and future intentions for these students.

Play in Emerging Adulthood

There is reason to believe that the effects of these pandemic-induced changes might be particularly impactful for young adults, given the nature and significance of life experiences during the late teens and twenties in industrialized societies. Arnett (2007, 2015) has argued that, due to several economic trends and social movements in the 20th century, a new stage of life has emerged between adolescence and early adulthood that he terms emerging adulthood, which extends from age 18 to age 29, with the ages 18 to 25 forming the core of this stage. Arnett posits that emerging adults tend to (a) be engaged in identity exploration through their activities and choices, (b) have lives marked by instability and regular change, (c) be self-focused in that they

can make their own decisions and chart their own courses, (d) feel as though they are occupying an in-between state, no longer an adolescent but not quite yet fully adult, and (e) experience life as being full of possibilities where many paths for their future are still open to them.

The residential campus of a university or college represents a particularly suitable place to be an emerging adult, as the academic and social choices it affords align extremely well with an individual's exploration of who they are, who they want to be connected to, and what they want to be and do with all aspects of their lives, from their education and employment to their romantic and play lives. This is especially true of students who are living away from home in a campus residence hall or in an apartment off-campus, as the separation from the home life they have known from affords even greater opportunities for self-focus and autonomy.

To date, research on the development of emerging adults has focused primarily on school, work, and social relationships. We argue that play is an important avenue for identity exploration, self-focus and sense of possibility for emerging adults (e.g., Willis, 1990). Thus far, however, research has yet to explore the meaning and role of play in emerging adulthood. Discussing the college student experience in general, Arnett (2015) states that

...college is more than simply vocational training... They [college students] want to have their share of collegiate fun too, and take part in the friendships, camaraderie, romances, partying, and communal joie de vivre that is naturally generated by having so many unattached young people together in one place. (p. 166)

If play provides opportunities for social connection and identity exploration in emerging adults, the disruption of this play may have particularly strong effects on their social and emotional lives. The closing down of university campuses as a result of the surging COVID-19 pandemic in early 2020 likely caused just such a disruption for most students and therefore provides an opportunity to better understand the role of play during this transitional stage of their lives.

The Current Study

In the current study, we explored how the upheaval of the COVID-19 lockdown affected the play of college students in the New York City metropolitan area - the early epicentre of the pandemic in the United States (López-Castro et al., 2021) - and the social and emotional impacts of those changes. Because our goal in this investigation was to better understand the full range of college students' experiences with play disruption, we utilized template analysis (King, 2004), a qualitative approach that allowed for the identification of themes across open-ended survey question responses from a larger sample than is typical in qualitative research.

Our research team approached this project from the position that play is important to the lives and well-being of emerging adults, and a general expectation that the changes due to the pandemic would result in the loss of social play opportunities for many. Nevertheless, we also anticipated possible silver linings such as increased

time for playing. Our particular research questions are:

1. How did the lockdown associated with the COVID-19 pandemic change the amount of play that college students engaged in?
2. How did the lockdown change the types and modalities of play that college students engaged in?
3. How did these changes affect college students' experience of play itself, as well as their broader social and emotional lives?

Method

Participants

Seventy-one undergraduate students enrolled at the State University of New York at New Paltz in the United States who were living in New York State at the time of data collection participated in this study. Participants were students taking courses in psychology who were recruited through an online subject pool system. We restricted participation to students living in New York State so that our entire sample would be experiencing the same state-wide COVID-19 related restrictions. They completed the survey online via Qualtrics survey software in exchange for research participation credits. A total of 77 participants completed the survey, but six participants' responses were not included in the analysis for one of two reasons. Three participants were not living in New York State at the time of survey completion. Three additional participants were excluded for providing only very brief, superficial responses to the survey questions, decided based upon both text length (when all of a participants' responses took up less than half a page) and consensus after a qualitative review of the responses by the coders. These three excluded responses had 175 words or fewer in answering the ten questions, whereas the median word count for the final retained sample was 551 words.

Demographic information is displayed in Table 1. Most participants identified as female, similar to the gender identity breakdown at the college. The average age was 20.99 years old ($SD = 5.10$ years). Nearly all participants (90.1%) were residing in the New York metropolitan area (Mid-Hudson Valley, 29.6%; New York City: 25.4%, Lower Hudson Valley 22.5%; and Long Island, 12.7%) during the time they completed the survey; the remainder (9.9%) lived in upstate New York. As seen in Table 1, a slight majority (54.9%) of participants had at least one household member who was considered high risk for complications due to COVID-19.

Table 1
Participant Demographic Characteristics

<i>Variable</i>	<i>Category</i>	<i>Frequency</i>	<i>Proportion</i>
Gender	Female	53	74.6%
	Male	18	25.4%
Year in College	Freshman (first year)	27	38.0%
	Sophomore (second year)	9	12.7%
	Junior (third year)	20	28.2%
	Senior (fourth year)	15	21.1%
Employment	Lost Job/Cannot Work Due to Pandemic	32	45.1%
	Not Currently Working	24	33.8%
	Work Outside of Home	9	12.7%
	Work Remotely	4	5.6%
	Mix of Remote and Outside	2	2.8%
High Risk for COVID-19	Yes	12	16.9%
	No	59	83.1%
Household Size (not including self)	0-1	7	9.9%
	2-3	41	57.7%
	4-5	23	32.4%
Members of Household at Risk of COVID-19 ¹	0	32	45.1%
		20	28.2%
	2-3	18	25.3%
	4+	1	1.4%

Context and Timing of Data Collection

The college is located within the Mid-Hudson Valley, roughly 75 miles north of New York City, the epicentre of the United States coronavirus outbreak in the spring of 2020 (Thompson et al., 2020). Data collection took place across an 11-day span, beginning on April 28th and ending on May 8th, 2020. The start of data collection was roughly six weeks after COVID-19 was declared a global pandemic by the World Health Organization (March 11th) and the college dismissed all students from campus to begin an extended two-week spring break (March 13th). Soon thereafter, students were informed that they would not be returning for in-person classes; instead, following spring break, all instruction moved to a remote, online format for the remainder of the semester. On March 22nd, the governor of New York state issued an executive order to shut down all non-essential businesses indefinitely and cancel or postpone all non-essential large gatherings ('Governor Cuomo Signs the 'New York State on PAUSE Executive Order', 2020). These restrictions were still in place throughout the time that we collected our data.

Survey Questions

All core survey questions were open-ended. We asked participants to complete the survey on a computer (rather than a smartphone) and do so in an environment free from distractions. To encourage in-depth and thoughtful responses, we also included the following statements: 'Please take the time to provide details as you respond to each question. As a guideline, think about the amount of information you might put into writing an entry in a personal journal. The more you share about your experiences, the greater the insights we can gain from our research.'

To orient respondents to the survey questions, we provided them with an overview of some diverse examples of play, from games to 'free-form activities such as dancing or blowing bubbles' and 'bringing a spirit of playfulness to everyday activities', consistent with Salen and Zimmerman's (2004) three categories of play (i.e., game play, ludic activities, and being playful). However, we did not present a fixed set of play activities for participants to reflect on. Instead, participants self-identified which of their own activities they considered to be forms of play. The survey questions themselves are shown in Appendix A and focused on (a) the participant's preferred ways of playing, (b) amount of play before and during the lockdown, (c) the role of others in their play, (d) the overall importance of play to the participant's life, (e) changes in play since the lockdown, and (f) the impact of those changes on the emotional state of the participant. Two final questions focused on other changes in the participant's life due to COVID-19 and the lockdown.

In addition to these open-ended questions, participants were asked to provide their age, gender, the geographical region in which they were living at the time that they completed the survey, year in school, number of individuals living in their household, whether or not they or other members of their household were considered high risk for complications due to COVID-19, and their current work status.

Analysis

All five authors were involved in the coding and analysis of the data. Because we were primarily interested in understanding how college students experienced changes in their play lives and the resulting emotions through the early weeks of the lockdown, we took a generally phenomenological approach that focuses on the centrality of an individual's lived experience. Phenomenology also acknowledges the necessarily interpretive nature of this endeavour. We described above our assumption regarding the importance of play in emerging adulthood, the likely challenges college students would face in maintaining their play lives under the lockdown, and the possibility of new opportunities for play. It's also important to note that because all but the first author were students during the data collection period, they witnessed aspects of their own experiences in the written responses and were sensitive to the potential for projecting their own meaning onto the words of our respondents.

Because of our large sample size, we placed greater emphasis on identifying patterns of experience across individuals as opposed to an ideographic analysis of a very small number of cases that is common to many

phenomenological approaches (e.g., interpretative phenomenological analysis; Smith et al., 2009). Therefore, we analysed participant responses using template analysis, a type of thematic analysis that involves the development and refinement of a hierarchical outline of codes (the template) based upon iterative cycles of applying existing codes to new batches of data and revising the template as needed (Brooks et al., 2015; King, 2004). We chose this method due to its applicability to samples larger than typically found in qualitative research, its flexibility in allowing researchers to incorporate new themes as they are uncovered, and its suitability for a team-based analytic approach. Template analysis has been used in past research to analyse qualitative survey data such as ours (e.g., Dornan et al., 2002, Kent, 2000).

Prior to any coding, all five coders read through every case at least once (the first author read through the cases twice) to familiarize ourselves with the data. We then began analysis by creating a draft template, based on the questions from our survey and our preliminary expectations for broad themes among the responses. This template consisted of four major themes: (a) play before social distancing, (b) the importance of play in one's life, (c) play under social distancing, and (d) other impacts of the pandemic. We then selected an initial batch of nine cases for all members of the team to code simultaneously but separately, and made our first round of changes and additions to the draft template through discussion and consensus based upon this initial batch. Further development of the template proceeded through an iterative process of coding batches of survey responses. Each batch consisted of between 8 to 15 cases. For each case in a batch, we worked individually, applying codes from the most recent version of the template to segments of text where possible, and provisionally revising the template as needed. This included adding or removing codes as well as changing the overall organizational structure of the template. New changes to the template based upon a single instance of a possible code from the data were considered temporary until a second instance appeared in the data later in that batch or in subsequent batches. At the end of each round of coding, the research team thus had a set of revised templates (one from each coder). We then met remotely to discuss and reconcile these revisions. Based upon these discussions, the first author updated the previous template to create the new version which we then applied to the next batch of cases.

Once we completed coding all participant responses, we selected six cases at random to code a second time to ensure that the completed template adequately covered the themes present in the data. Each of these six cases was coded individually by two researchers who then compared their coding of that particular case. The pair of researchers discussed any discrepancies and if the discussion suggested that the template should be revised, this was brought to the entire team for a final decision. After this quality check was completed, any necessary changes to the template were made, resulting in the final version of the template, which appears in Appendix B (except for codes related to non-play impacts of the lockdown, which have been omitted for brevity). Lastly, batches of cases were randomly assigned to members of the research team to be coded with this final template. In sum, each case was preliminarily coded by every coder as the template was being developed, and once again

by a single (randomly assigned) coder using the final version of the template. Results are based upon the coding done with the final template.

Results

In describing the play life changes experienced by the college students, we focus on the themes that connect with the research questions we outlined above, namely the impact of the COVID-19 lockdown on the amount, type, and modality of play among college students, and the effect of those changes upon their experience of play and their social and emotional lives. However, we also highlight additional important themes which emerged in the development of our template. In total, it is fair to say that there is no single representative experience of the lockdown's effects on one's play. As recommended by King (2004), we do not exhaustively summarize all themes present in the final template. Rather, we focus on the themes most central to the experiences of play before versus after lockdown began. These themes underscore just how diverse the experience was across individual students, both in terms of the play itself, and the emotional impact of the experience. In presenting quotations from respondents, case numbers are provided in brackets, and grammatical and spelling errors are corrected for ease of reading but are otherwise presented exactly as written.

Changes in the Amount of Play

When asked to reflect on the amount of play they had been getting prior to the lockdown, most of the 42 students who responded to this prompt either indicated that they had either been getting about the right amount of play ($n = 21$), or not enough play ($n = 17$); few ($n = 4$) indicated that they had been playing too much prior to the pandemic. Six weeks after the lockdown began, most students had experienced a shift in the amount of play they were engaging in, in one direction or the other. Among those students who described the change (or lack thereof) in play, many students reported a decrease in play ($n = 20$), but even more reported an increase ($n = 33$; only 3 reported no change in the amount of play). For those reporting a decrease in play, a lack of opportunity to engage in one's preferred play or increased workload were the most common reasons:

I was getting a lot of play because life was still normal and there were no restrictions on what we could do... I am [now] not getting enough of my normal play activities. I need to be able to see my friends and see my other family members. [15]

I think I was pretty good at balancing my free time for play, and was very satisfied with the balance between my work load and free time... Much less time [now] is spent playing due to my inability to go out much or have company. It seems to be replaced with sleeping more and studying more. I definitely feel as though I am not getting enough time to have fun, because of my lack of means to do so. [37]

I think I am definitely getting less play than I should be getting, because I have less immediate access to my friends. Also because with the transition to online learning, my workload was not lightened whatsoever... so I have found less time to play. [69]

As mentioned, other students reported getting more play than before the lockdown. Interestingly, while some students (like those quoted above) noted that increased workload from their (now) online courses had led to less time to play, others found that the transition to online learning or job loss actually allowed for more time to play (or at least more freedom to procrastinate):

I was getting maybe 4-5 hours of play a week. I think I should have been getting in at least an hour per day... I think it is [now] closer to the 7 hours a week I'd previously aimed for since I have slightly more free time due to classes being online now. [22]

I didn't get much time to play [before] because I was drowning in assignments, so when I did have the free time I was exhausted... I spend much more time playing now because I have less time that I need to be in classes and I no longer have my job. [58]

I think I could have had more time for play but I was busy with school responsibilities as well as work... I think that when COVID-19 began at the end of March until maybe a week or 2 ago, I was getting MORE play in than I have in a long time, pretty much all of my free time was spent playing either outside with my boyfriend or inside with my video game. [67]

Some students ($n = 8$) reported that the freedom to play afforded by the change in circumstances meant that they were now playing too much and that this was making it difficult to stay motivated and be productive with their coursework:

I've been playing too much and I'm using it as a distraction from the situation and I'm not using my time productively so in this instance play isn't really a good thing for me. [1]

I think that focusing on school should be a priority of mine but it is getting increasingly difficult to stay motivated with the online learning. [6]

I am probably playing more than I should be. It is hard to stay focused on schoolwork at home. I often get distracted by play, like using my phone, watching tv, working out, etc. I would rather be doing those activities than doing my school work. [16]

Social Play: Losses, Adjustments and Reconnecting at Home

By far the single most reported experience among college students was the loss of in-person social play with friends and partners ($n = 14$). Many students discussed the heartbreak of not being able to engage in favourite activities with those close to them:

I feel like play always strengthened my relationships with people but I feel as though I'm emotionally distant as well as physically nowadays. [41]

The amount of play time with others is definitely impacting my emotional health. I feel a lot more depressed. I have more mood swings than normal. It has made me sadder. Play is just awful for me nowadays. [47]

Though I am lucky to have my housemates with me, I still feel hurt by the lack of social interaction available to me. I understand that social distancing is vital during these times and I am practicing it as much as possible. However, I do miss being able to socialize/play with a variety of peers. [65]

These reactions are not surprising, given that a significant majority of students reporting play preferences indicated that they either preferred to play with others ($n = 24$) or enjoyed a mix of social and solitary play ($n = 21$). Those few who expressed a clear preference for solitary play ($n = 7$) tended to indicate that they were still able to play enough and engage in their preferred play activities. Even for students who preferred to play alone, however, the loss of social contact was painful:

[The pandemic] is ruining everything. I wanna go out to dinner, be able to high five people without being cautious. I don't even want to think about it because it'll upset me. [31]

Not surprisingly, many students ($n = 25$) adjusted as best they could to the separation from friends by moving their interactions online to keep in touch and enjoy time spent together. Such adjustments most commonly included playing video games online with friends (whether mobile, console or computer games) or using online platforms such as Discord, Skype or FaceTime to socialize. Often, students appreciated that the Internet afforded some way to stay connected, but lamented that it was an inadequate substitute for physical proximity:

I miss the personal feel of physically being around others when I play. Online is great because at least we can still play in some capacity so I'm grateful but it just isn't the same. [13]

I feel depressed and want to enjoy my hobbies and enjoy them with my friends... At night I can FaceTime with my friends or hangout with my sister but I wish I was having more fun. [48]

On the other hand, because most students likely ended up returning to their family home when the lockdown began and in-person classes ended, there was a noticeable increase in quality play with siblings, parents, and pets:

During the [first] few days [of the pandemic], I engaged in completing puzzles with my family. We would work on a big one for a couple hours a day until we finished it and then went out to find more than we could buy. We also started playing more card games. [3]

I've been playing with my dogs a lot more. Also, just engaging with my family a lot more. Whether it's making face masks or dinner with my mom, it's nice. [19]

I'm in a house with three of my siblings. We have a volleyball/badminton net that we use daily together. We also started playing card games together and watching movies together every night. [32]

For students who elected to stay in their apartments near campus during the lockdown, housemates were often

cited as a positive presence in their new lives:

Luckily I decided to stay in New Paltz with my two housemates. As such, I am still able to benefit from healthy social interaction though I still practice social distancing as a whole. We have spent much more time baking as a form of play. Not to mention, we have begun to play more drinking games (as safely as possible) to steer ourselves from boredom. [65]

Discovering and Rediscovering Ways of Playing

The highly publicized reports of people trying out new activities at home such as baking bread and knitting (Domonoske, 2020) applied to some of the college students in our sample as well ($n = 6$). These new activities tended to be creative in nature and were wide-ranging, from picking up a musical instrument to never-before-tried art forms and more:

Since social distancing began I have really started to paint and freehand draw as well as learn to do resin art molds. [59]

Some new things include building and putting together new structures for my rabbit to play on and extra outdoor activities. [68]

The “new normal” of being away from college and separated from friends also led some students ($n = 12$) to rediscover old forms of play they had not engaged with for some time:

[My family] also started playing more card games. This was something that we used to do a lot when I was younger but stopped as everyone had other priorities. [3]

I've started doing a few things that I haven't done in a while because I've never had the time to or I haven't had any motivation. Now I have no choice but to whip up some old activities such as playing piano, solving puzzles, coloring, watching tv shows. [36]

The Benefits of Getting Enough Play

Several students shared that they were finally able to get what felt like a healthy amount of play, and spoke of the emotional benefits they enjoyed as a result, either in the form of protecting against psychological distress or by providing joy and enrichment:

[Play] has greatly improved my emotional state and I feel I have more time in my day to do the things I really want to do but in the past did not have the time. These days, the play feels very rewarding and gives me a break from online work. [30]

I think play feels like relief these days, and it has positively impacted my emotional state. Because I do not leave the house often, I need to find other ways to cultivate and expend energy, and play has been a great outlet for that. [45]

I've never played so much in my teen life as I have during social distancing. This is the amount of play I feel like I should be getting on a regular basis... In general, I feel that play during this time has greatly benefited my emotional health. [52]

'Play Doesn't Have Meaning Anymore'

While a number of students clearly benefited from the amount and type of play they were getting during the early weeks of the lockdown, many ($n = 21$) volunteered that the very nature of play had changed for them as a result of the drastic changes in their daily lives. For some ($n = 13$), the problem wasn't a lack of play; rather, it felt as though play had been drained of its essence and was somehow less pleasurable, fulfilling, or wholesome than it was before the pandemic. This was often especially true for play activities that revolved around media consumption:

I am playing a lot but not in ways that are beneficial to my mental health. I find myself feeling like a vegetable especially when staring at screens for the majority of the day, and you can only play so much Scrabble. [8]

I am doing more play that isn't really mood lifting like watching shows and going on social media. I don't think I am getting enough play that makes me happy. [42]

I am finding that I have less energy and motivation to do the things I want to/that bring me joy. I am doing more activities like watching tv that involve limited engagement and effort. [68]

My main way of "play" nowadays is scrolling aimlessly through TikTok for ungodly amounts of time. Does this make me happy? Very slightly, it's probably more of an addiction now than anything. Due to it being an addiction, I don't feel the same "high" as I did when I first started using it. I'm essentially numb to the play I participate in typically. [56]

Many students ($n = 36$) reported that they generally saw play as a way to alleviate stress, prevent burnout, and provide an escape. This was often seen as an important benefit of engaging in play:

Playing allows you to have fun, relax, unwind, and especially clear your mind of a lot of the crap we deal with in society. It gives people an escape from the hardships of everyday life. [13]

Unfortunately, for some ($n = 9$), play became a necessary response to cope with the harsh new realities associated with the pandemic, rather than as a freely chosen activity done for the sheer joy of it:

My play isn't a want anymore. It's more of a necessity for my wellbeing. Play feels so forced. I like to be able to have a choice of play. [18]

On some days it's really hard to get out of bed and do work. So forcing myself to play in some ways is a response to the stress and sadness I feel. It is a way to cope with what is going on. [25]

Play doesn't have meaning anymore because of everything that is going on around me. I want to go back to my other experience with play. [44]

A New Appreciation for Play

Reflecting on their recent experiences during the early weeks of the lockdown, some students ($n = 10$) either came to the realization that they had been taking play for granted beforehand or expressed a new appreciation for how important social play is to their lives and well-being:

I feel like play/social interaction is such an important aspect of our lives, even more than we know. I realize for myself how much I want/need play with others, now that I can't have it... Makes you realize how you took for granted the fun you had, when you could actually be with people, touch people and hug people. [29]

Sometimes, it was not the loss of play which led to this insight, but rather a shift in perspective or extra opportunities for play that emerged out of the sudden change in one's situation:

I feel more fulfilled emotionally by spending this extra time with my kids. Play feels natural and I would love to incorporate more and continue this after social distancing has been eliminated. [7]

Before social distancing, I did not think about it too much. I just saw my hobbies as a calming outlet to a stressful day to day life. It was not something of importance to me as I did not see it as a priority... During social distancing, I find that I am playing every day. There is always some sort of activity that I find myself engaging in. I believe that the amount I am playing now is how much I always should have been. [32]

Finally, some students ($n = 7$) reported an intention to make play a higher priority in their lives, either right away or after the pandemic was over, or anticipated that they would appreciate their play time when they were able to be among friends in person again:

I feel as though I took play before social distancing for granted and miss those opportunities I had in the past although I'm missing play so much right now that I feel I will cherish and appreciate it way more once social distancing is over. [40]

Within Case Analysis

From our cross-case analysis, we saw wide varieties in the experiences of play from before to during the COVID-19 lockdown. In this section, we balance this approach with the introduction of a single within-case analysis in order to share the holistic experience of a single participant, as recommended by those experienced in template analysis (Brooks et al., 2015).

In order to select one participant out of our sample pool for a within-case analysis, we went back through our coded cases and pulled out those that fit several criteria. Namely, we were interested in participants who: a) wrote in sufficient detail (at least a full page of single-spaced text), b) exhibited a certain level of reflection in

terms of the depth and breadth of their responses, c) had a compelling story on an individual level, and d) highlighted a majority of the themes we have discussed thus far. From this process, we identified eight participants. All members of the research team then read all of the eight cases before coming together as a group and ultimately selecting a participant we felt presented a story we wished to explore more deeply. We refer to this participant as MJ.

This participant, a 22-year-old senior from upstate New York, spoke initially of their prior play as socially oriented. Social play came for this participant in both structured contexts - for example, as a member of multiple school dance teams - and more unstructured contexts such as long walks or crafting with friends. MJ expressed deep sadness over the loss of in-person play, but also some excitement about the new possibilities introduced by the lockdown. Like many in our sample, MJ had to return to their family home as COVID-19 protocols were put into place, leaving behind the friends and loved ones that they had met at college. In continuing to connect with friends through online platforms, MJ reflected on how the medium seemed to affect the nature of their interactions: 'The social play is different now than it is with my friends because there is less joking but more story telling.'

In terms of in-person play, MJ discussed going on long walks with their sisters and dog, working on puzzles together, and playing badminton. Additionally, being at home gave MJ the chance to revisit activities they once enjoyed, such as creating art collages, or walking around in nature. They expressed gratitude for the variety of play options they had available to them as a result of being together with family during the lockdown:

I have felt grateful that I can come home and laugh with my family and go outside with my dogs and my sisters to play badminton or take a walk or I can come inside and do a puzzle or draw.

Similar to many other respondents in the sample, MJ shared that before the COVID-19 lockdown, play often fell toward the bottom of their list of priorities: 'I always felt like I put play last on my list of priorities because my schedule was so jam packed with other things.' The spread of the coronavirus prompted them to reprioritize play as a way of managing the resulting strain on their motivation and emotional state:

Now, I value [play] more because I am more stressed and so I put it higher on my priority list and incorporate it into my routine more... I am playing A LOT. I think that it is good though. I am so stressed with everything going on but finding new fun play activities is a good way to stay busy and not fall into a trap of losing energy and motivation.

In sum, the experience MJ shared with us was one of grief and sadness for their prior social play life, but also one of resilience and rediscovery. They mourned the loss of the rich college experience they had become accustomed to, with all the opportunities for play that accompany campus life. At the same time, they found ways to capitalize on changing circumstances to prioritize play, particularly with family. MJ's overall experience of play in early lockdown captures the mixed emotions many of our respondents shared around changes to how and with whom they could play as the lockdown took effect.

Discussion

The purpose of the current study was to gain insight into how the COVID-19 lockdown in the spring of 2020 affected the play lives of university students in terms of the amount of play, the type of play, and the effects of those changes on their emotional lives. The experiences and interpretations of the meaning of play for participants during this time period were strikingly varied. Some students wrote about the protective benefits of their play - such as providing a way to reduce stress or temporarily escape the reality of the pandemic - as well as new and old ways of playing that they recently discovered or rediscovered. However, many students (sometimes the same ones) grieved the loss of social play activities that were not currently possible or were replaced with online experiences that felt like poor substitutes. Some students also noted that their play now felt different and drained of its essence, which they engaged in out of necessity rather than for the joy and fulfilment of the activity. And for a number of students, the pandemic and its effects on daily activities triggered both a realization that play is central to leading a rich life and an intention to play more and appreciate it more fully when possible. These findings are consistent with the experiences of several game scholars who reflected in recent essays upon the ways in which the pandemic changed where they played, how much they played, and the purpose and meaning of their pandemic play (Cox, 2021; Daneels, 2021; Hutchinson, 2021).

All told, the drastic and sudden upheaval of all aspects of life for the university students we surveyed had a large impact on the play lives of many of them. The sometimes intense struggles with these changes may be understood in the context of their lives as emerging adults (Arnett, 2015). Nearly all respondents in the current study (97%) were between the ages of 18 and 29, the currently accepted range for this life stage (93% were between 18 and 25, an earlier proposed age range for emerging adulthood). As mentioned earlier, emerging adulthood is a period of growing autonomy and identity exploration that comes with a sense of possibility. The lockdown in the state of New York in response to the growing COVID-19 pandemic in the spring of 2020 abruptly halted this process of self-discovery and exploration in many ways. Most students lost some, if not all, forms of play that had brought them joy and were separated from those with whom they shared that joy.

In addition, many students who were living in residence halls or apartments now found themselves back home. While many students (including MJ, the participant we focused on in our single case analysis) appreciated the time they were able to spend with family members and pets, some chafed at the lack of freedom that came with once again living with their parents for an unforeseeable amount of time, especially if they had experienced challenging or dysfunctional family dynamics (e.g., 'I liked the freedom of the college experience. I'm under my parents' roof again so I have to follow their rules. I wish I could let loose and have fun at college again.' [48]). Collectively, these changes might produce a sense of stagnation or even backwards progress with respect to their personal journey toward adulthood. It is understandable that, upon being pulled from their social circles (at least in person) and suffering a loss of autonomy to explore and choose one's play

activities, many students experienced and reported sadness, grief, depression and anxiety at the loss of those experiences.

In addition to the relevance of the emerging adulthood life stage of most college students, the experiences of our respondents may be understood in the context of our universal human need to chart our own course, to grow, and to connect with others. Self-determination theory (SDT; Deci & Ryan, 2000, 2008) is a macro-level theory of human motivation which posits that individuals can experience vastly different levels of initiative to engage in an action. Specifically, a person can experience a lack of motivation (amotivation), controlled motivation (motivation due to external factors such as reward and punishment or internal factors such as a need for approval or an avoidance of shame) or autonomous motivation (either a desire to act due to the inherent satisfaction of the behaviour - known as intrinsic motivation - or an acceptance of the value of the behaviour). According to SDT, intrinsic motivations are associated with the highest level of functioning and the greatest psychological health, and people are intrinsically motivated when the behaviour results in the satisfaction of one or more of three basic needs: autonomy, competence, and relatedness. Autonomy refers to the ability to choose an action or path that aligns with one's goals and desires. Competence is the ability to pursue tasks at which one is skilled and/or where continued growth and improvement is possible. Finally, relatedness refers to the ability to connect meaningfully with others and feel a sense of belongingness.

In its purest form, play is intrinsically motivated - in other words, people engage in play voluntarily for its own sake rather than due to some external reward or as a result of being coerced to do so. Indeed, most classic and modern definitions of play presume that the player has freely chosen their play activity or their behaviour while playing (e.g., Huizinga, 1938; Salen & Zimmerman, 2004). This is consistent with the fact that, under normal circumstances, play activities tend to satisfy one, two, or all three of the basic psychological needs of autonomy, competence, and relatedness. For example, a game or sport involving two or more people allows one to execute a chosen strategy (autonomy), demonstrate skill and learn from past play sessions (competence), and connect with those they are playing with (relatedness).

Self-determination theory can help us understand some of the key themes that emerged from the students' survey responses. For example, when asked how they typically played prior to the pandemic, the vast majority of students described one or more activities that involved other people, including socializing, going on day trips, and playing sports, tabletop games or video games with others. When the lockdown began, some of these activities were no longer available and others had to be adapted to an online medium which only allowed for partial connection with friends and partners. A number of students reported sadness at not being able to be physically present with others and engage in physical contact as a means of connection (e.g., hugs, high-fives). These changes likely contributed to students' needs for relatedness going at least somewhat unsatisfied.

An examination of the role of autonomy can also explain some of the students' experiences with play, both negative and positive. On the one hand, the unavailability of many students' preferred forms of play (which

stemmed primarily from restrictions from being physically present with others to reduce spread of the virus) in and of itself disrupted the satisfaction of their need for autonomy. Students also commonly mentioned that play felt less satisfying because it felt forced or a necessary response to the difficult situation rather than a voluntarily chosen activity done for its own sake, which suggests a perceived lack of autonomy and a greater sense of extrinsic rather than intrinsic motivation. On the other hand, some students adapted effectively by finding new outlets for their creative energy (e.g., learning a musical instrument or exploring an art form), which promoted satisfaction of their autonomy need, as well as their competence need as they became more skilled at those activities. And students who found more time to play than beforehand due to fewer work or school obligations also reported a sense of freedom and well-being that was missing prior to the lockdown. The varied play experiences of our respondents suggest that, beyond core human needs, individual differences likely also contribute to one's relationship with play and the outcomes associated with it. While our data did not allow us to investigate the role of such differences, there are some interesting possibilities. For example, trait playfulness – the tendency to engage in playful ways of thinking or acting – is associated with a more active lifestyle (Proyer et al., 2018), greater creative expression (Proyer et al., 2019), and greater relationship satisfaction in one's romantic partner (Brauer et al., 2021). In terms of the current research, more playful students might have had greater practice prior to the pandemic in finding creative ways to retain a healthy play life despite changing life circumstances, and as a result may have experienced less distress when their play routine was upended. Among big five personality traits, a student's levels of extraversion and emotional stability may have also influenced their play experiences during the lockdown. Extraverted students were likely to engage in socially-oriented play before the emergence of COVID-19, and the restrictions on social gatherings may have been especially painful to them. Students with higher levels of emotional stability, on the other hand, may have experienced less distress as a result of the emerging pandemic overall, and may have been able to play in a more voluntary, joyful way than those who pivoted to play as a necessary means of escape the stressors associated with the lockdown.

Limitations and Future Directions

Several limitations of the current research should be noted. First, the sample comes from a particular college in the north-eastern United States. This is an appropriate geographical location for this investigation, given its proximity to the epicentre of the pandemic in the U.S. at the time of data collection in the spring of 2020. However, college students at other institutions - especially those in regions that did not close as quickly or fully - likely had somewhat or even very different experiences. Second, our survey methodology prevented us from delving deeper into participant responses with follow-up questions. During the process of coding responses and building our template, we noted many instances where we felt there was more to the participant's story than what we could glean from their statements. Future phenomenologically-oriented research on significant changes to the play lives of individual adults such as those explored here would benefit from the richer data

that semi-structured interviews can provide. Third, because restrictions due to the pandemic lasted far beyond the first two months, it would have been insightful to check back in with our respondents in the summer or fall of 2020 (or beyond) to explore how they had (or had not) adjusted to the “new normal” and learn whether they had undergone additional changes to their play lives and the further meanings they had drawn from their experiences as the months wore on.

In terms of additional future research directions, the current study suggests that more attention should be paid to the effects of significant life changes upon the play experiences of adults (emerging or otherwise) across a variety of domains. For example, common major life events and milestones - such as obtaining one’s first career-oriented job, getting married or moving in with a romantic partner, having children, losing one’s job, getting divorced, being incarcerated, experiencing significant illness or injury, and retiring - are likely to bring with them adjustments and challenges but potentially also new opportunities for play. In studying play among nursing home residents, Mancini (2016) identified some patterns similar to those we discovered in the current study. For example, many residents mourned the loss of preferred forms of play that were no longer possible due to physical and structural barriers, whereas some were able to adapt their play to their new situation. Almost no research exists on the impact of such life transitions during adulthood on the experiences of play and the significance of such changes, and we view this as a fruitful and important area for future research.

The relevance of self-determination theory to play generally suggests that it has great potential for the study of play motivation and subsequent well-being in adults. While SDT has become a popular theoretical framework to understand the design and play of video games (e.g., Ryan, Rigby & Przybylski, 2006), research has yet to investigate broader patterns of play choice and their outcomes based upon their satisfaction of the needs of autonomy, competence and relatedness. For example, are there - as suggested by some students in our study - forms of play which are inherently more or less fulfilling? If so, do adults who regularly engage in forms of play that better satisfy basic needs tend to enjoy greater psychological health than adults who engage in less fulfilling play (or less play overall)?

Relatedly, although past research has generally shown that play is beneficial to the lives of the adults who engage in it (see, for example, Van Vleet and Feeney, 2015, for a review), our research suggest that play may not always result in positive outcomes. For example, some students acknowledged that play under lockdown had lost its value, or that they were engaging in so much play that it was negatively impacting their productivity in school. There is a growing literature exploring how playing video games to cope with or escape from life stressors might promote addictive patterns of play (e.g., Maroney et al., 2019), but more research is needed on the benefits and costs of using play in any form as a regular coping strategy for managing the stress resulting from personal situations and life events.

Finally, we could also find no research that explicitly explores the role of play in young adults in the context of the emerging adulthood developmental journey. Thus far, research on this life stage has focused primarily

upon domains such as academics, employment, and interpersonal relationships (e.g., Gonzales Avilés et al., 2021; Katsiaficas, 2017; Murphy et al., 2010). We believe that play also has an important (but as yet largely unstudied) role in the process of identity exploration among emerging adults. For example, passion for certain activities can lead to a realization that one wishes to incorporate it into their career (e.g., becoming a rock-climbing instructor), and a shared love of a particular type of play may become a central activity in a long-term romantic relationship.

Conclusions

When seismic events such as the COVID-19 pandemic upend lives, it is natural that the primary focus should be upon the health, economic, and social costs and effects upon those lives. However, we have learned from our respondents in this study that times of crisis can also dramatically affect emerging adults' play lives, which can in turn significantly impact their emotional well-being. While there were clear themes to these effects across participants, the impacts were by no means uniform. Many students struggled mightily with the changes, some seemed to be able to make adjustments that made the situation bearable, while others actually flourished. The overarching message is not that the lockdown had a singular effect on college students' experiences with play - far from it - but rather that their play matters deeply to them, sometimes more than they themselves originally realized.

Appendix A

Survey Questions

1. First, please write about how you tend to play in general. Think about the different kinds of play that you enjoy. What sorts of play activities did you regularly or occasionally engage in, before social distancing? This can include activities that you still do now. Please provide as much detail as possible.
2. How much play were you getting in the weeks and months prior to social distancing, compared to how much play you think you should have been getting?
3. Please write about the role of other people in the ways that you usually play. How important or not important is it for you to engage in play with others versus playing alone? Why do you think it is like that for you?
4. How important or not important is play to you in your life overall, and why?
5. What sort of play have you been engaging in since social distancing began? Your play now might be similar to before social distancing, or it might be different. Or, you might be engaging in a mix of old and new ways of playing. Please provide detailed examples.
6. How much time do you find you are playing now, during social distancing, compared to how much play you think you should be getting?
7. How has your amount and type of play during social distancing impacted your emotional state and/or other aspects of your daily life? How does play feel these days for you?
8. What else would you like to share about your experiences with play before and/or during social distancing? What other thoughts, feelings, or insights would be important to know?
9. What changes have you made to your daily activities in order to engage in social distancing during the COVID-19 crisis, if any?
10. Based on your personal health, living situation, family, region, and any other relevant factors, how much do you feel the current COVID-19/Coronavirus pandemic is affecting your life? Please explain which factors are affecting your life, as well as any other information you feel is relevant.

Appendix B

Final Template of Qualitative Codes

1. Varieties of Play (both before and after social distancing)

- 1.1. Socializing (e.g., hanging out, laughing/joking, dating, drinking/drinking games/going out to bars/parties/restaurants, (window) shopping, concerts, storytelling, online quizzes, student clubs)
- 1.2. Travel/day trips
- 1.3. Video games (alone or with others, any platform)
- 1.4. Tabletop games and puzzles (e.g., card games, game nights/groups)
- 1.5. Outdoor/nature-based activities (e.g., hiking, walking, gardening, kayaking)
- 1.6. Physical activities
 - 1.6.1. Games (e.g., Twister, hide and seek, horseshoes, pool, cornhole)
 - 1.6.2. Sports (e.g., basketball, football, hockey, bowling)
 - 1.6.3. Exercising/working out (e.g., running, yoga, exercise classes)
 - 1.6.4. Dancing
 - 1.6.5. Other physical activities (e.g., sport biking, skateboarding, swimming, playing catch, rock climbing, snowball fights)
- 1.7. Artistic/creative activities (e.g., photography, acting, writing, painting/drawing, performing music, cooking/baking, makeup, making collages, crocheting, pottery, colouring)
- 1.8. Media consumption
 - 1.8.1. Reading
 - 1.8.2. Listening/singing to music
 - 1.8.3. Watching TV/movies/comedy
 - 1.8.4. Consuming social media (e.g., videos on YouTube, Tik Tok)
- 1.9. Playing with children
- 1.10. Playing with pets
- 1.11. Adopting a playful attitude

2. The Role of Others in Play

- 2.1. Preference for social play
 - 2.1.1. Playing with others enhances the experience
 - 2.1.1.1. Keeps you engaged
 - 2.1.1.2. Makes activity more memorable
 - 2.1.2. Playing with others boosts energy (“fuelled by”, “feed off energy of others”)
 - 2.1.3. Playing with others is in our nature as social creatures
- 2.2. Enjoy/need both solo and social play
 - 2.2.1. Depends on the social/solitary nature of the activity
- 2.3. Preference for playing alone
 - 2.3.1. Playing alone provides a break or allows one to recharge from social activities

3. Purpose/Benefit of Play

- 3.1. It creates or increases happiness, joy, and other positive states
- 3.2. It enhances one’s quality of life (framed positively or negatively)
- 3.3. It maintains or strengthens connections with others
- 3.4. It is beneficial for mental health/self-improvement
 - 3.4.1. Gets you through tough times (“keeps you sane”/“keeps you from going crazy”)
 - 3.4.2. Provides an outlet for frustration and other negative emotions
 - 3.4.3. Allows one to feel more in touch with one’s self

- 3.5. It inspires or enhances creativity
- 3.6. It promotes physical activity
- 3.7. It promotes social activity
- 3.8. It reduces or prevents stress or burnout
- 3.9. It provides balance by giving a break from work or school
 - 3.9.1. It promotes productivity/motivation
- 3.10. It provides an escape or distraction from one's thoughts, concerns, or situation
- 3.11. It relieves boredom and helps pass the time
- 4. Play and the self**
 - 4.1. Developmental origins of relationship to play (e.g., influence of parents, siblings)
 - 4.2. What/how I play is part of my identity
 - 4.3. What/how I play comes from my personality
 - 4.3.1. I'm an extrovert so I like playing with others
 - 4.3.2. I'm an introvert, am shy, or am independent so I like playing alone
 - 4.3.3. Without being nudged by others, I don't play
- 5. Barriers to play**
 - 5.1. Insufficient time (due to school, work, etc.)
 - 5.2. Depression or insufficient motivation to play
 - 5.3. Lack of space to play (e.g., closed gyms, not being in right area for activity)
 - 5.4. Tiredness or insufficient physical energy
 - 5.5. Lack of opportunity for social play (e.g., can't meet up with others)
- 6. Social Distancing and Amount of Play**
 - 6.1. Judgment of amount of play before social distancing
 - 6.1.1. Too little play
 - 6.1.2. Enough/right amount of play
 - 6.1.3. Too much play
 - 6.2. Amount of play under social distancing
 - 6.2.1. Change from before
 - 6.2.1.1. Less play than before
 - 6.2.1.2. Same as before
 - 6.2.1.3. More than before
 - 6.2.1.3.1. Due to more free time
 - 6.2.2. Judgment of amount of play
 - 6.2.2.1. Not enough play
 - 6.2.2.2. Enough/right amount of play
 - 6.2.2.3. Too much play
- 7. Social Distancing and Type of Play**
 - 7.1. Changes in play activities
 - 7.1.1. Decreases
 - 7.1.1.1. Playing with others in person
 - 7.1.1.2. Exercising
 - 7.1.1.2.1. With others
 - 7.1.1.2.2. At gym
 - 7.1.1.3. Playing sports (e.g., pickup games)
 - 7.1.2. Increases
 - 7.1.2.1. Playing with family or housemates

- 7.1.2.2. Playing remotely with others
 - 7.1.2.2.1. Online video game play
 - 7.1.2.2.2. Socializing online (e.g., Discord, Netflix party, FaceTime, Skype)
- 7.1.2.3. Playing alone
 - 7.1.2.3.1. Playing video games (e.g., console, mobile games)
 - 7.1.2.3.2. Watching TV and movies
 - 7.1.2.3.3. Watching social media videos
- 7.1.2.4. Exercising (physical or mental)
 - 7.1.2.4.1. Working out at home
 - 7.1.2.4.2. Mindfulness activities (e.g., yoga)
- 7.1.2.5. Walking and spending time outdoors
- 7.1.2.6. Playing with pets
- 7.1.2.7. Engaging in artistic/creative activities (e.g., crafts, drawing)
- 7.1.3. Rediscovering old forms of play
 - 7.1.3.1. Creative activities (scrapbooking, music (piano, ukulele), drawing, colouring, baking)
 - 7.1.3.2. Puzzles (e.g., jigsaw puzzles)
- 7.1.4. Trying or learning new things (e.g., guitar, TikTok dances, painting, embroidery/sewing, woodcarving, badminton, building structures for rabbit, resin art)
- 7.2. Playing just like before
- 7.3. Engaging in the same play activities but with modifications (e.g., added precautions to prevent spread of virus, with different people, in a different location)

8. Impacts of Changes in Play Due to Social Distancing

- 8.1. Emotional reactions to play changes
 - 8.1.1. Boredom
 - 8.1.1.1. From lack of play
 - 8.1.1.2. From unavailability of preferred play
 - 8.1.1.3. From too much play
 - 8.1.2. Guilt about amount of play
 - 8.1.3. Missing past play activities or playing with others
 - 8.1.4. Sense of loss over cancelled future plans for play
 - 8.1.5. Sadness or depression from lack of social play
 - 8.1.6. Relaxation
 - 8.1.7. Improved emotional state/mental or physical health from more play time
 - 8.1.7.1. Positive change in emotion (more happiness, less guilt) due to excuse to engage in more play, given free time/less responsibility
 - 8.1.8. No significant impact
- 8.2. Play feels different now
 - 8.2.1. Play feels less pleasurable, valuable, beneficial or interesting
 - 8.2.2. Play feels forced, like a response rather than a choice
 - 8.2.3. Play doesn't feel like play or feels like "something is missing"
 - 8.2.4. I play now to distract myself rather than for enjoyment
 - 8.2.5. Less wholesome play (e.g., "self-indulgent", "addictive") has replaced more fulfilling or enriching play
- 8.3. Other impacts of play changes
 - 8.3.1. Play is getting in the way of doing school-work or being productive

8.3.2. Play has helped me bond or reconnect with family members or others

8.3.2.1. Play has allowed me to rekindle old relationships

9. Insights and Intentions About Play

9.1. I realize how important play is

9.2. I need to prioritize play

9.3. I want to keep playing more once this is over

9.4. I took play for granted before social distancing

9.4.1. I miss it more than I thought I would

9.4.2. I will appreciate it more after this is over

9.5. I need social connection or may be more extroverted than I thought

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