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Capitalising on professional capital in Lebanese schools post-pandemic

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ABSTRACT

The purpose of the present study was to explore professional capital in Lebanese public and private schools during the transition to online learning, in order to identify lessons that can be applied as teachers and administrators face the transition to a post-pandemic environment. Using a qualitative design, semi-structured interviews were conducted with two teachers and one administrator at each of three public and three private schools in Lebanon. The data were analysed using the constant comparative model. Findings revealed the importance of readiness, the process of becoming ready, the role of the lead administrator and parents, having flexibility in decision-making, and allowing collective responsibility in decision-making. Practical implications were then discussed to support in the transition back to in-class learning.

Introduction

With the onset of the COVID-19 pandemic, schools throughout the world were faced with a growing list of quick decisions to be made, from whether to remain open or close their doors, to how best to serve students without sacrificing safety or quality of education. Discrepancies amongst students' access to technology and how conducive their home environment was for learning led to even greater struggles to continue learning, with a great share of the strain to offer equitable opportunities falling on teachers' shoulders (Hargreaves & Fullan, 2020).

However, not all teachers responded in a similar fashion to the pressing demands of the shift to online learning and flexible instruction amidst the pandemic. Differences were due in part to variations in the populations of students being served, as well as the context in which teachers worked (Chaaban, Arar, Sawalhi, Alhouti, & Zohri, 2021; Hargreaves & Fullan, 2020). For instance, while some teachers in Lebanon received training and professional development on the use of educational technologies prior to the transition to online learning, others were not equipped with such knowledge or skills and were left to navigate the sudden transition on their own (Chaaban et al., 2021). Additionally, some teachers were supported by colleagues and school administration in their navigation of remote learning, while others worked in more siloed conditions. These discrepancies highlight a primary underlying and distinguishing feature between schools: while some schools maintained and fostered high levels of professional capital, others were operating with significantly less.

Originating in the economic sector, the concept of professional capital is one whose importance is difficult to deny in times of drastic change, as education during the pandemic has demonstrated. Defined as the convergence of human capital, social capital, and decisional capital, professional capital is seen as essential to effective instruction, particularly in times of challenging educational circumstances (Hargreaves & Fullan, 2012). Furthermore, the three components are closely related: when there is an emphasis on developing social capital in their schools, teachers also develop human capital, creating opportunities for the collective group of teachers to support one another in their pursuit of more knowledge and skills (Fullan, 2016). Similarly, expanding decisional capital requires an investment from school leadership in teachers' human and social capital so teachers have an opportunity to reflect on their choices with others and improve their practice as a result (Adams, 2017). Nothing can be dealt with in isolation because, in education, all of the elements interact, and even the act of teaching itself cannot be reduced to a single individual (Strom & Viesca, 2020). Consequently, professional capital in schools is not held solely by teachers, but by the institution as a whole, as can be evidenced by the interdependency between school leadership and teachers in the development of professional capital (Belay et al., 2021; Tong & Razniak, 2016).

Professional capital can manifest itself in schools in a variety of ways. Human capital can be evidenced by teachers pursuing continuous professional development opportunities to advance their knowledge of technology integration in the classroom; social capital is manifested when they engage in professional learning communities and peer learning opportunities to share best practices with colleagues (Chaaban et al., 2021; Hollweck & Doucet, 2020). Decisional capital is observed when teachers make decisions that directly impact their practice and allow them to engage in their role as not only a teacher, but as an agentic teacher leader (Chaaban et al., 2021; Chaaban, Sawalhi, & Du, 2021)

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Previous research has demonstrated the power of professional capital within schools: higher levels of professional capital amongst teachers is more closely related to greater job satisfaction than leadership practices within the school (Adams, 2017). Additionally, promoting the development of professional capital amongst teachers is related to higher levels of teacher self-knowledge and confidence, as well as a greater willingness to try new strategies and collaborate (Nolan & Molla, 2017; Reed & Eyolfson, 2015). Despite these benefits, not all teachers have had sufficient opportunity to develop their professional capital (Adams, 2017). Because effective school leadership can play a significant role in creating opportunities and optimising teacher performance (Minckler, 2014), failing to develop professional capital amongst teachers can have serious implications for not only teachers, but for students, as well.

In Lebanon, a country plagued by regular electricity outages, limited access to personal technologies, and frequent internet failure, professional capital becomes even more critical in equipping teachers with the knowledge, support, and discretion needed to handle online instruction amidst sudden educational transitions. Indeed, when teachers are only expected to be compliant, professionalism suffers. As Sahlberg (2020) notes, 'what many school leaders and teachers have been asking during these months is more trust in their professional judgment' (p. 5). Placing greater trust in teachers is particularly worthy of consideration and implementation in Lebanon, where consistency and equitable access to educational opportunities was a veritable impossibility pre-pandemic, only to be amplified midst the global chaos.

Due to the widespread disruption caused by the pandemic, educators and administrators were faced with a rare opportunity to not only step back and assess the current status of the education system in Lebanon, but also to reimagine its future and how best to support our teachers in the process. It is by honouring teachers' professionalism that they may be better supported in fulfilling and growing in their potential (Hollweck & Doucet, 2020). Toward this end and using the framework of professional capital (Hargreaves & Fullan, 2012), the present study aimed to explore the status of professional capital in public and private schools in Lebanon amidst the transition to online learning, with the goal of capitalising on lessons learned in order to guide the path toward a postpandemic education.

Theoretical framework

Capital is defined as the worth of an individual or group, particularly as it can be channelled to accomplish an intended goal (Hargreaves & Fullan, 2012). This overarching concept can be applied to a variety of contexts, yielding such constructs as business capital or financial capital. Consequently, professional capital has emerged as an application of capital to professional work and is defined as the convergence of human capital, social capital, and decisional capital (Hargreaves & Fullan, 2012). In order to promote professional capital, all three components must be addressed individually but also in combination (Fullan, 2016).

Human capital

Human capital refers to 'an individual's cumulative abilities, knowledge, and skills developed through formal and informal experiences' (Pil & Leana, 2009, p. 1103). In the field of education, human capital is represented in the content knowledge and competencies that teachers have relative to the discipline they teach, in addition to their understanding of the pedagogical content knowledge required to know how to teach and how children learn most effectively (Belay et al., 2021). More specifically, human capital in an educational context is concerned with the specific 'subject matter and its teaching knowledge, understanding the students and their learning styles, and exhibiting emotional and social capabilities to support students' from diverse backgrounds' (Belay et al., 2021, p. 18). In other words, human capital encompasses whether teachers and administrators have sufficient knowledge, capacity, and desire to act effectively (Hollweck & Doucet, 2020).

The framework of professional capital as presented by Hargreaves and Fullan (2012) is significant in its emphasis on promoting not only administrators, but also teachers as agents of change (Cox, 2014). By developing professional capital in a school, teachers are more likely to feel a commitment to one another, which can then translate into a greater sense of accountability (Fullan et al., 2015). This is manifested by a shared responsibility for continuous improvement amongst school staff and administrators, in addition to a shared responsibility for all students' success (Fullan et al., 2015).

Furthermore, increasing teachers' human capital is seen as a necessary prerequisite for successful educational outcomes (Belay et al., 2021). As researchers have shown, the more human capital possessed by teachers—as indicated by more years of experience—the greater their students' achievement both on school tests and other measures, as well as the greater the benefits conferred to colleagues (Daly et al., 2020; Podolsky et al., 2019). However, it is worth noting that teachers' human capital may not always be accurately captured by years of experience in the profession; as noted in a study by Wiswall (2013), teachers who left the profession earlier tended to have higher levels of innate teacher quality, suggesting that the relationship between years in the profession and human capital may not always be linear.

Social capital

While human capital may appear to be comprehensive of all that effective education requires, focusing on human capital alone is not sufficient for its development (Hargreaves & Fullan, 2012). Instead, it is important to also promote social capital, or the quality of interactions and relationships amongst individuals that affects teachers' access to knowledge, their sense of expectation and trust, and their likelihood of adhering to the same behavioural code (Hargreaves & Fullan, 2012). In this way, social capital centres on 'resources that exist in social relations (i.e. relational ties) between individuals as opposed to the resources of a specific individual (human capital)' (Daly et al., 2020, p. 10).

By focusing on the collective improvement of the group as a whole, individuals may simultaneously improve the quality of each member in the group (Fullan, 2016). The promotion of social capital increases human capital by expanding individuals' networks for learning, allowing teachers to share and merge their individual human capital, and encouraging the valuing of their peers and colleagues (Daly et al., 2020; Hargreaves & Fullan, 2012). Importantly, social capital extends beyond school walls to encompass all stakeholders in students' education (Cox, 2014). Social capital is developed through collaboration, professional networks, and a culture of mutual assistance (Cox, 2014). While school leadership plays a significant role in its promotion, social capital appears to develop best when school leaders create a conducive environment without trying to directly influence it (Minckler, 2014).

The significance of social capital in schools cannot be overstated: in the absence of sufficient social capital, human capital—even when it exists in abundance—may fail to attain the effectiveness it could otherwise (Fullan, 2016; Hargreaves & Fullan, 2012). Forming positive relationships in the context of social capital can promote both cognitive and affective benefits, both of which can be particularly salient for teachers (Fox & Wilsonn, 2015). Additionally, research has shown that by engaging in more reflective practice in collegial settings, teachers' confidence increased in their own self not only as a teacher, but also as a learner willing to try new things (Nolan & Molla, 2017). An emphasis on social capital has also been shown to contribute to ongoing learning and peer support, allowing teachers to share ideas, knowledge, and questions as their sense of community is strengthened (Nolan & Molla, 2017).

The benefits of professional capital do not stop at the teacher: the presence of social capital has been shown to correlate with higher student achievement (Leana, 2011). Furthermore, the presence of social capital in a school has even worked to counteract low levels of human

capital, yielding higher levels of student achievement than was found at schools with lower social capital (Leana, 2011).

Decisional capital

Decisional capital refers to the ability to make necessary discretionary judgments (Hargreaves & Fullan, 2012). Specifically, decisional capital is manifested when one is able to make decisions in situations of uncertainty, and when the rules one typically adheres to provide insufficient guidance on the best course of action (Hargreaves & Fullan, 2012). As Nolan and Molla (2017) note, teachers' decisional capital is related to the 'level of empowerment, voice and autonomy they have in their day-to-day professional practices' (p. 16). Developed in large part through practice and further sharpened in environments marked with social capital, decisional capital is the distinguishing mark of a professional (Hargreaves & Fullan, 2012). Decisional capital is fueled in deep learning cultures by the presence of both human capital and social capital (Fullan, 2016), both of which help empower the professional to make more informed decisions over time and across circumstances.

Researchers have highlighted the importance of teachers possessing the ability to impact their work environment through active contributions and decision making (e.g., Vähäsantanen et al., 2019), and this becomes even more important as a result of the changing contexts necessitated by the pandemic's impact on schools (Chaaban et al., 2021). The presence of such decisional capital allows teachers to make judgments in light of their changing contexts that are in their students' and their own best interest (Campbell, 2012).

Professional capital and change

The development of professional capital relies firstly on the identification of a clear vision that provides a clear direction for education (Fullan et al., 2015). In moments that risk the absence of such direction – such as amidst global changes in the nature of education resulting from a pandemic – what becomes of professional capital? As Reed and Eyolfson (2015) state, 'when treated as professionals and given the opportunity to participate in building and extending the profession, teachers rise to the occasion' (p. 38). In other words, it is the presence of high levels of professional capital that can aid schools in navigating such large-scale changes.

Professional capital and the pandemic

Emergency remote learning is not the same as online learning under more ordinary circumstances (Hollweck & Doucet, 2020). Due to the nature of the pandemic, teachers and administrators were afforded little time to adjust to the new mode of learning, often with little sense of direction (Hollweck & Doucet, 2020). Furthermore, in school systems that adhered to a strict top-down leadership approach, Winthrop (2020) notes the missed opportunity to allow teachers and school staff to respond according to their best judgment in the constantly shifting landscape. In school systems that were marked by this absence of decisional capital amongst school staff, teachers and administrators were often forced to adjust to directives at the last minute, frequently to the detriment of clarity within the school (Hollweck & Doucet, 2020). In other school systems, teachers could do nothing but wait until they received their directives from their designated leadership (Hargreaves & Fullan, 2020). Compliance, Sahlberg (2020) argues, causes professionalism to suffer. It is by instead honouring the professionalism of teachers and school leaders, or their human and decisional capital, that schools can best be transformed in times of change (Hollweck & Doucet, 2020).

Additionally, the pandemic has highlighted discrepancies and inequalities on all fronts (Sahlberg, 2020), not the least of which is in regards to human capital amongst teachers relative to their educational technology skills (Hollweck & Doucet, 2020). Amidst the abundance of educational technology options available, teachers often struggled to navigate the field, attempting to make last-minute informed decisions during the transition about what would work for them and their students and what would not (Hollweck & Doucet, 2020). While the challenges of teaching have increased over the years—not least of all amidst the pandemic—the appropriate supports have not always followed suit (Hargreaves & Fullan, 2020).

Finally, in regards to social capital, 'zoom fatigue' during the pandemic required teachers and school leaders to find more innovative and effective means to promote meaningful collaboration (Hollweck & Doucet, 2020). The acknowledgement of parents-the 'gatekeepers of continued student learning' (Chaaban et al., 2021)as a key stakeholder in such collaborations is not to be overlooked (Pyhältö et al., 2014), particularly amidst the COVID-19 pandemic (Ehren et al., 2021). While the pandemic did require the increase of teacher-parent collaboration-an important contributor to social capital in education-differences in parents' readiness to be deeply involved in their children's education had the potential to yield different results, with some parents expressing their frustration at the change in quality of the education their children were receiving (Hargreaves & Fullan, 2020; Hollweck & Doucet, 2020). Overall, however, social capital during the pandemic seems to have depended largely on its manifestation in a given school before the pandemic: in schools where collaborative professionalism already existed, the pandemic accelerated it even further (Hargreaves & Fullan, 2020).

The Lebanese context

Schools closed because of the pandemic on February 29 in Lebanon (Chaaban et al., 2021). Distance learning became the delivery model for all learning activities, with variations arising between schools due to differences in access to personal devices, Internet, and electricity. Differences in socioeconomic status also led to broader distinctions between how distance learning was carried out in private schools and in public schools. For instance, private schools that served higher SES student populations were able to rely more steadily on synchronous learning through video conferencing, in addition to asynchronous learning through PowerPoint lectures, worksheets, and other web resources that could be accessed on learning platforms or social media applications.

Public schools, on the other hand, were encouraged by the Ministry of Education to use any means possible to continue learning, such as through recorded lectures and online exams (Bizri et al., 2021). The Ministry provided teachers with accounts on Microsoft Teams, but the insufficient technological infrastructure-in addition to the lack of teacher training or supports in place-meant the accounts were not activated (Chaaban et al., 2021). Across the board, both private and public schools faced numerous challenges in the 2019-2020 academic year, marked by not only the pandemic, but also the political, economic, and social instability that plagued the country and led to the social uprising in October 2019 (Bizri et al., 2021). Following the start of the political and social revolution and before the onset of the pandemic, schools closed their doors for over two months, with only a few private schools able to sustain student learning from a distance as teachers and institutions tried for the first-but not the last-time that year to adapt to remote learning.

Methods

Research design and participants

The present study followed a qualitative approach to explore the following research question: how was professional capital—comprised of human capital, social capital, and decisional capital—manifested in Lebanese public and private schools during the pandemic? Based on the determination that school context can impact teachers' sense of professional capital, we decided to include both private and public schools in the study. Using stratified purposive sampling (Patton, 2002), we recruited only primary teachers to reduce variations in experience that

could be attributed to grade level taught. Based on our criteria, we then sent invitations to several primary schools in the country to request participation. Twelve teachers, all female and spread across six schools—three private and three public—volunteered to participate. The teachers' years of experience ranged from eight to 33, with their ages ranging accordingly from 31 to 50. Eleven participants held a bachelor's degree while only one held a Master's degree. In addition to the teachers, we chose to also collect data from the principal at each of the six schools to triangulate and gain further insight from multiple perspectives regarding professional capital at the school.

Data collection and analysis

To collect data, we relied on a semi-structured interview protocol, allowing participants to openly express their perceptions and experiences during the transition to emergency distance learning resulting from the pandemic. Participants answered questions asking them to consider the first steps and decisions made following school closure, any training opportunities that were pursued following school closure, instructional approaches used, support from school leadership, and how they overcame any challenges. Interviews were conducted in either Arabic or English, depending on the participants' preference, and they lasted around 40– 50 min. All data were audio-recorded and transcribed in preparation for analysis and then stored on a password-protected computer. We complied with the required protocol for data collection and storage, and we notified participants of the voluntary nature of their participation, as well as how we would maintain their confidentiality.

Data were analysed for the present study using the constant comparative model (Miles & Huberman, 1994). The initial stage of data analysis followed a top-down deductive methodology, guided by the professional capital theoretical framework. Participants' responses were coded within the framework, and responses within each component of the framework were analysed for emerging themes. We then followed with a second, inductive stage of data analysis (Patton, 2002) to determine if further themes emerged from the data that were not adequately accounted for by the theoretical framework.

Findings

To answer the research questions in the present study, we analysed the interview data for patterns in responses across the three constructs of professional capital. The results of this analysis are presented in the sections below.

Human capital

With regards to human capital, the theme of *readiness* and *becoming ready* was prevalent in participants' responses. In this theme, there was a clear divide between public and private schools. Specifically, participants in private schools often indicated that while the transition to online learning was a surprise, they were—to a certain extent—ready for it because of their training before the onset of the pandemic. For example, the principal at one private school indicated, 'We were ready for [the transition to online learning]. Back in 2017, we had announced our vision for 2020, which is basically what we're doing now.' A teacher at the same school similarly noted, 'We had some technical skills already. The school has Smart Boards, and we all use ActivInspire in class, so we did have technical skills to use.' Another private school principal noted, 'The school was ready for online learning. We had the equipment—some buildings were better prepared than others—but because we were able to pay more money, we had a better infrastructure, so we were fine.'

Public schools, however, faced a notable challenge due to the absence of comparable levels of technology use and equipment in their classrooms prior to the pandemic. One teacher at a public school stated, 'Nobody was ready, and nobody was prepared. Nobody knew what would happen—it was like a shock for us. We were not prepared, neither the teachers nor the students, and the necessary infrastructure was not available.' The principal at another public school indicated the same: 'Teachers were not prepared or trained to teach online. Many teachers had never used technology in their lessons, and many of them did not have the knowledge to create lessons online. It was never a need for them.'

The distinction in technological readiness levels between public and private schools created implications for the consequent process of becoming ready. At private schools, while technological training was still offered, principals and administrative staff also had the flexibility to focus on mental readiness, or preparing and calming teachers mentally and emotionally for the sudden changes they were facing. As one principal at a private school recalled:

I kept telling everyone to not panic. This was our plan. We've already done phase one [as part of our vision]. We've done phase two, and we're going to go on to phase three. It came sooner and under a context that we had not created. But we're ready.

Additionally, because they already had some background with educational technology, teachers at private schools could often take the initiative to learn more about varied tools to enhance their instruction. One teacher noted, 'There were some teachers who began to discover on their own, and some teachers were already using some apps, but now if you ask some, they will tell you a whole list.' Another teacher recalled, 'I attended many webinars to work on my own skills; I would attend all the workshops that the school provided.' And while some workshops and training were offered through schools, many others were sought out independently by teachers. According to one teacher at a private school, 'I had to sit literally hours on webinars, on YouTube videos. I was self-taught and I had a lot of things that I had to learn on my own.'

At public schools, teacher initiative became even more critical due to the absence of sufficient and relevant training offered by the Ministry of Education, the responsible body for offering professional development sessions at public schools. While the Ministry of Education did offer training on the use of Microsoft Teams, teachers in public schools found it largely unusable due to the strained economic conditions and lack of personal technology devices—and often internet—in the homes of the children they taught. A public school principal remarked:

The schools cannot provide any workshops except through the Ministry, and they only gave them a workshop on Teams, but this was too fast and the teachers did not have the chance to apply it because the students and the parents do not have the devices to use the application. It was just a waste of their time.

Instead, teachers had to take the initiative to discover more accessible methods of technology that relied on the use of less cellular data. One public school teacher described:

Because some students do not have access to [Microsoft Teams], and it takes up too much Internet, when I send them the PowerPoint with my voice explaining everything, this was a better option for us. [...] If you want to add animations, or convert it into a video, there are many techniques that I did not know, and I would go to YouTube and watch the videos and learn.

Another teacher echoed the sentiment, stating 'There were many initiatives taken on a personal level on a variety of topics related to online instruction. So now we are comfortable working on PowerPoint and finding resources online and, of course, this has affected our work greatly.' The principal at the school even indicated that teachers who were confident with a specific tool would then offer their own training to their colleagues.

In summary, private schools often had some degree of preparation in technology tools or training prior to the pandemic, but public schools rarely did. So, while private schools entered the pandemic with some degree of readiness, public schools needed to rely much more on becoming ready, which often then required personal initiative, which teachers consistently enacted. As one principal succinctly stated, the reason for the school's success amidst the transition was 'not the tool. It's always the teachers.'

Social capital

While marked discrepancies could be observed in human capital between private and public schools, social capital hinged more acutely on the role of the lead administrator at the school, regardless of whether it was a private or public institution. In this way, the findings point to the key role played by the administrator not in directly creating the structure for teachers to collaborate, but rather in providing the type of social and emotional support necessary to create an environment conducive for collaboration, as suggested by Minckler (2014). This links, as well, to the importance of establishing positive relationships amongst key stakeholders (Fox & Wilsonn, 2015). In particular, in schools where the lead administrator took on the role of providing emotional support and a safe environment to learn from one's mistakes, teachers reaped notable benefits. For example, at one private school, the principal informed the teachers, 'We will learn when we make mistakes, so do not worry about the mistakes you're making. I have your back; the division directors have your back.' Consequently, one teacher at the school noted, 'We discussed, and we shared our feelings about if we were supported. [...] We would not have explored new things had it not been for the guidance of my director.' Furthermore, by proactively taking a stance to ensure teachers felt emotionally supported during the transition to online learning, administrators also fostered an environment for teacher collaboration. For example, one teacher noted, 'Our relationship with the principals is very smooth [...] we supported each other emotionally.' She then continued to illustrate:

We are a real team; we are one team, so if I made any exercise, or PowerPoint, or game, we share with each other. [...] We collaborate and we do things for each other, so we do not all do the same work. We try to make it easier for each other: if someone cannot do something, we all help. So, we take each other's circumstances into consideration.

At another school with a similar environment of administrative support, one teacher observed:

A lot of keeping the closed doors that you had maybe in the classrooms when you were at school - they were all opened up. Now everybody was in everyone's classroom, as well. Everyone was inside your world, as well.

In contrast, schools where the lead administrator was more emotionally removed and continued to view their role as solely administrative did not succeed as notably in fostering such collaboration. At one private school, for example, the lead administrator claimed, 'My role is more of a theoretical role, rather than being hands-on or a down-toearth role...I rarely communicate with [teachers] directly.' Teachers at the school noted greater challenges in their ability to collaborate with one another. One teacher stated, 'Sometimes the ability to collaborate was a bit difficult because we were all at home. [...] We would be exhausted, but we still had our work done.' While they noted administrative support in instances such as for student disruptions, they also commented:

Now, we barely collaborate. [...] Mostly, we support each other emotionally. We were meeting more at the beginning of the year. Now, we barely meet. They gave us a lot of resources, and techniques and videos to watch, but once that was over, we do not meet anymore.

Amidst the transition, then, to online learning, teachers indicated the need for both emotional and technical support. In schools where emotional support was offered by principals, technical support could be comfortably explored and offered by fellow teachers, thus furthering the growth of their social capital. However, in situations where administrators focused on offering solely technical support or were less proactive in offering emotional support, teachers indicated a greater sense of disconnect from each other and a more limited ability to collaborate and foster the development of their social capital.

Despite setbacks, it is important to note that administrative support was generally felt in the public schools: one teacher commented that, 'Everything that I am discussing, the administration helped create the foundation for. They follow up on the smallest of details.' Another recalled how the principal offered support, provided teachers with workshops, and opened the school building for teachers who did not have internet at home.

While the same importance of the lead administrator in setting the tone for the development of social capital could be seen in public schools, faculty and staff faced an additional obstacle in the form of limited technology devices and internet at home, and a consequently greater need to *rely on parents as part of their social capital development*. One teacher noted, 'When we were online, you could say that it was the parents who were learning with the students.' A principal even stated that one of the first decisions was 'how to convince the parents [of the value] of their children learning online.' Another principal comprehensively captured the importance of collaborating with parents in the transition to online learning:

The success of the school depended on the parents, and because there were factors beyond the parents' ability, they could not respond, and so we were not successful. Maybe at times they could not respond, and sometimes they did not care to respond, and it's not possible to know what the problem is, and that's why the success of online teaching cannot be measured from our side only, from what the teachers were doing. It's a partnership with the parents.

However, obstacles in communication and securing buy-in from parents interfered in how that administrative support could then be traced down to the teachers. Multiple teachers at public schools described how the administration served as the bridge of communication between parents and teachers. Despite that, one teacher observed, 'The school cannot do anything. The principal sent [parents] messages, but not all parents have the resources, and the school does not either.' Difficulties in managing external stakeholder satisfaction resulted in divided responsibilities, where principals attempted to mitigate the negative repercussions felt by children in public schools, but in the face of uncontrollable circumstances, could not always succeed. The result was often a sentiment shared by teachers in public schools that there was insufficient time for collaboration, despite best efforts amongst teachers to compensate.

Decisional capital

With regards to decisional capital, private and public schools again faced a noteworthy distinction: *flexibility in decision-making*. Specifically, public schools were bound to abide by decisions made by the Ministry of Education, while private schools had significantly more flexibility in their decisions. One public school teacher noted, 'Sometimes the school would make its own decisions, but they would be small. Big decisions, such as school openings, would come from the Ministry.' While this inherently restricted the decisional capital at public schools, it did not eliminate it. As administrators and teachers at public schools demonstrated, decisional capital received significant emphasis during the transition to online learning. Specifically, in both public and private schools, decisional capital, when enacted through collaboration, tended to yield the best results. One principal at a public school stated:

I think the collective responsibility was very important. Instead of telling the teachers that they must do something, I always involved them in the decisions, especially when these decisions came from the Ministry, so it was not a matter of obligation - it was more about their responsibility towards their profession and students.

By promoting *collective responsibility in decision making*, administrators communicated to teachers the importance of their own experience and knowledge. One private school teacher noted, 'As teachers, we take part in the decisions, so it's not that [the administration] make the decisions and we only implement.' Another teacher effectively influenced her school's overall approach to online learning: 'I played a big role with the administration, [saying] that we do not just want lecturing in our lessons. I really tried hard with the administration and I volunteered to give teachers training sessions.' Whether through direct communication or through hierarchical channels, teachers at some schools were actively involved in shaping the online transition. A private school teacher noted, 'The channel was our director: we would express whatever our thoughts were and our director would pass it on...and they listened.' Such decision-making collaboration was often met with gratitude: one public school teacher commented:

I'm grateful we had these meetings with administration for their support and to collaborate so the decision was not made on her own. Of course, at the end, the decision is hers to take, but she would listen to what everyone had to say and she would take ideas from everyone and she would ask for input from everyone, so this was really nice in our administration.

By involving teachers in making informed decisions, administrators also gained further comfort in their own decisions. As one principal stated, 'What makes me comfortable in making a decision to stay online is that our teachers are doing an amazing job.'

In addition to teacher involvement in shaping school's decisional capital, parents also played a significant role, particularly in public schools. Because parents of children at public schools played a pivotal role in securing devices and reliable internet for their children—something parents of children at private schools could often focus less consciously on—they were also invited to participate in shaping schools' decisions amidst the transition. Whether agreeing to use What-sApp for instruction rather than Teams 'as requested by parents,' or actively surveying parents to determine what mode of instruction would suit their children best, public schools involved parents as important stakeholders in making decisions.

In schools where teachers were not involved in the decision-making process, teachers sometimes suffered from ill-informed decisions as a result. For instance, at one private school, the lead administrator stated:

I try to be eclectic in my decisions; I try to take what's best in every decision I received from the Ministry. Sometimes I hit that right and sometimes wrong, so when I commit a mistake in taking any decision, I go back to the counsellors of our school and ask for their help. [...] Usually I'm very democratic with them – 'Let me hear your opinion on this and that,' – and I hear them all. This time, I said we do not have this luxury. Just apply what decision I am taking this time.

Teachers at this school did not always support the resulting decisions. One teacher commented:

They took the decision to honour the Ministry of Education's decision to go via hybrid. I honestly can say I do not approve of it. [...] I'm not supposed to influence the decisions made by the principals—no, we were just informed of their decisions, but they were happy to hear our opinions.

Another teacher at the same school similarly lamented the decision to rotate two groups of students between online and in-person learning, noting the added work and confusion it created. She added, 'At the end, it's up to the teacher. She should have her own way, to find her own way to develop and have her own classroom management.'

In summary, whether through collecting input from parents and teachers, or empowering teachers to make the decisions necessary to best address their students' needs, both private and public schools reflected the importance of fostering decisional capital amidst the transition to online learning.

Discussion

The present study aimed to explore professional capital in Lebanese public and private schools during the transition to online learning in order to identify lessons that can be applied as teachers and administrators face the transition to a post-pandemic environment.

The first theme relevant to human capital that emerged from the findings was that of readiness. Specifically, public school teachers were generally not as prepared as their private counterparts for the transition to online learning due to limitations in funding that restricted access to educational technologies prior to the pandemic. Educational disparities existed even before the pandemic began and, in most countries, this could be seen in the inequities in access to digital technologies, which the pandemic seems to have amplified even further (Sahlberg, 2021), as the findings of the present study similarly suggested. In Lebanon, where the gap between public and private schools is notable (Baroudi, 2019), differences in exposure to educational technologies prior to the pandemic were further exaggerated when education shifted to depend entirely on such technologies. Even outside of the classroom, the increasing rate of poverty in the country, exacerbated by the economic crisis, meant many families had limited access to appropriate devices to sustain remote learning effectively (Bizri et al., 2021). Consequently, this points to the importance of ensuring equity in and amongst schools in Lebanon, an endeavour that could be initiated from the national level by providing greater funding for public schools, or from the school level. For instance, Baroudi (2019) noted the lack of appropriate training for public school administration in setting effective budgets, which, if rectified, could reduce educational sector debts and bypass unnecessary expenses. If public schools have more available funds to then contribute to their access to educational technologies, the levelling of the playing field between public and private schools could be more easily attained, as the unequal transition to online learning has made evident. Addressing inequalities early-being preventative rather than reactive-is not only the more effective route in terms of cost (Sahlberg, 2021), but also in terms of ensuring equitable chances of student success.

Due to differences in readiness, the process of becoming ready was a second theme that emerged in the present study. As teachers at private schools were more familiar with the technological aspect of online learning, principals could focus more on promoting faculty's emotional and mental well-being while teachers took the initiative to learn about educational tools to be applied in their online lessons. In public schools, teacher initiative was even more critical, often because the training offered by the Ministry of Education proved largely unusable given the constraints on resources experienced by public school students and their families. Self-directedness amongst teachers is critical in both times of change and times of stability (Campbell, 2012; Sahlberg, 2021; Vähäsantanen et al., 2019). This was evident in the present study: teachers in both Lebanese public and private schools who demonstrated such initiative and self-directed behaviours consistently did so to the benefit of their students and the effective execution of online learning, despite constraints beyond their control. Promoting and supporting the development of self-directedness amongst teachers should therefore serve as a continued goal post-pandemic. Additionally, the findings of the present study point to the importance of knowing the technology access students have prior to designing the online learning experience. As researchers re-assess what the digital divide means today, the prerequisite of having home technologies-as well as the opportunity, time, and space to use them-has proven critical (Ng, 2021; Talaee & Noroozi, 2019). This has led to a proposal for balanced technology use, relying on technologies only when they enhance quality teaching in a way that could not be attained otherwise (Hargreaves, 2021; Ng, 2021). As schools transition out of fully online learning, it will be pertinent to remember such goals: continuing to empower teachers to be trusted initiative-takers, while ensuring technology use does not become the unchallenged norm as long as there are students who exist on the other side of the digital divide.

With regards to social capital, the important role of the lead administrator was notable in both public and private schools: in schools where the lead administrator focused on providing emotional support and a sense of community, teachers were able to collaborate more effectively with one another. This aligns with what Minckler (2014) observed: school leadership's role is to create the environment for the development of social capital rather than try to control it directly. As seen in the present study, such an approach on behalf of the lead administrator promoted social capital development, primarily by creating a safe and conducive environment for it. The responsibility, then, fell to teachers to collaborate effectively with one another, which was feasible due to the environment that had been created. This points to the role administrators should embody post-pandemic: it is not enough to focus on managerial tasks while expecting teachers to collaborate with one another of their own accord. It is important to note that previous research has indicated that principals in Lebanon have tended to be more effective in managerial tasks than in leadership tasks (Baroudi & Hojeij, 2020). However, research on principals in Lebanon has also shown that teachers tend to view principals as effective leaders if they place an emphasis on building strong human relationships by listening to teachers' feelings and concerns and motivating them (Harb & Karami-Akkary, 2021). Therefore, as the present study showed, administrators in Lebanon can begin adopting an instructional leadership style by securing teachers' emotional and mental well-being, while also providing the time and space for teachers to collaborate. By so doing, they become active members of the collaborative process, thereby promoting their own effectiveness as leaders while allowing teachers the capacity to work effectively with one another.

Additionally, findings indicated the importance of relying on parents as part of social capital development. Given that online learning largely happened in students' homes, parent buy-in became a key part of the collaborative process in ensuring online learning was a smooth and effective endeavour. As Cox (2014) noted, social capital extends to all stakeholders involved in a child's education, which includes parents, particularly when learning is happening remotely at home. This implies the need to continue to involve parents as active stakeholders in children's education post-pandemic. There are multiple avenues for continued parental involvement in children's learning, including the involvement of parents in educational technology use at home (Talaee & Noroozi, 2019). The pandemic has emphasised the importance of creating strong bonds between parents and teachers, and as the primary setting for learning transitions back to the classroom, it will be worth preserving this lesson in the aim of maximising the development of social capital in schools.

In terms of decisional capital, flexibility in decision-making referred to private school's greater ability to make decisions without being bound by the Ministry of Education, as public schools contractually were. Due to the minimal autonomy given to public schools in Lebanon, the role of public school principals is often limited to purely bureaucratic tasks (Baroudi, 2019). Such centralised control over public schools has been observed to have multiple effects, ranging from reduced teacher happiness and effectiveness, to even the quality of the school building itself (Mattar, 2012). Amidst the transition to online learning, such centralised control has had similarly negative effects, particularly as trusting teachers and administrators to make the right decisions in times of transition has proven to be critical during the pandemic (Chaaban et al., 2021; Sahlberg, 2021). As the transition following the pandemic poses an ideal opportunity to question the effectiveness of how things have always been done, it will be a worthy endeavour to similarly encourage the greater allotment of agency to public schools and the administrators and teachers who are 'closest to the action' (Sahlberg, 2021, p.17). In addition to allowing greater agency for public schools, the Ministry of Education could seize this transition as an opportunity to form productive partnerships with private schools, to learn from and apply what

worked well for them to form a new model of public education that serves all students effectively.

Finally, schools with collective responsibility in decision-making involved faculty and administration-as well as parents-in the collaborative process to reach decisions they believed would best serve the needs of their students. In the absence of collective responsibility, administration would sometimes make ill-informed decisions that teachers would then bear the burden of managing. Prior research has similarly pointed to the importance of teachers' professionalism amidst the pandemic, which has required them to overcome widening inequalities, develop technical proficiency, and collaborate with parents and communities to ensure the delivery of an effective education (Ehren et al., 2021). To do so requires collective agency, or 'the ability of individual teachers to act collectively and draw on systems of mutual support' (Ehren et al., 2021, p. 62). Previous research has also revealed that teachers view collaboration as part of a principal's effectiveness: principals who involve others in decision-making are more likely to be viewed as effective leaders (Harb & Karami-Akkary, 2021). As the education of children is a joint effort shared by administrators, teachers, and parents, and as each member shares part of the experience that makes a child's education complete, the sense of shared responsibility is one that should shape educational systems post-pandemic, encouraging open communication and soliciting insight from all members involved.

Conclusion

As the pandemic has made clear, shared professional capital amongst faculty and administration in educational institutions should be an integral part of every school, every day. Through human capital, teachers in all schools should be equipped proactively with the tools and skills necessary to teach in a diversity of settings and under a diversity of constraints, and this requires adequate funding and support from administration and governments. Through social capital, teachers should be supported in their collaborative efforts, working alongside their administrators and students' parents to achieve a common goal. And through decisional capital, teachers and administrators require the agency to be able to make informed decisions as they see fit in order to best serve the needs of their students. When teachers and administrators are trusted, they have proven—as in the present study—that they are able to move things forward, even amidst an emergency. Post-pandemic, then, is the time for such a climate to emerge from the lessons learned, to empower and entrust those responsible for the education of the coming generations.

Declaration of Competing Interest

The authors declare no conflict of interest in the present study.

References

- Adams, C. A. B. (2017). Professional capital: Principal practice and teacher job satisfaction [Paper presentation]. In Proceedings of the annual meeting of the American educational research association 10.302/1184091.
- Baroudi, S. (2019). Designing the Lebanese public education budget: A policy document analysis. The International Education Journal: Comparative Perspectives, 18(3), 25–38.
- Baroudi, S., & Hojeij, Z. (2020). The role of self-efficacy as an attribute of principals' leadership effectiveness in K-12 private and public institutions in Lebanon. *International Journal of Leadership in Education*, 23(4), 457–471. 10.1080/13603124.2018.1529822.
- Belay, S., Melese, S., & Seifu, A. (2021). Advancing teachers' human capital through effective leadership and institutional safety: Mediating effect of professional learning and teaching climate. *Cogent Education*, 8(1), 1–18. 10.1080/2331186X.2021.1912488.
- Bizri, A. R., Khachfe, H. H., Fares, M. Y., & Musharrafieh, U. (2021). COVID-19 pandemic: An insult over injury for Lebanon. *Journal of Community Health*, 46, 487–493. 10.1007/s10900-020-00884-y.
- Campbell, E. (2012). Teacher agency in curriculum contexts. Curriculum Inquiry, 42(2), 183–190.
- Chaaban, Y., Arar, K., Sawalhi, R., Alhouti, I., & Zohri, A. (2021). Exploring teachers' professional agency within shifting educational contexts: A comparative study of Lebanon, Qatar, Kuwait, and Morocco. *Teaching and Teacher Education*, 106. 10.1016/j.tate.2021.103451.

- Chaaban, Y., Sawalhi, R., & Du, X. (2021). Exploring teacher leadership for professional learning in response to educational disruption in Qatar. *Professional Development in Education*. 10.1080/19415257.2021.1973070.
- Cox, E. (2014). Professional capital in rural and isolated schools in the United States [Paper presentation]. In Proceedings of the annual meeting of the American educational research association.
- Daly, A. J., Liou, Y. H., & Der-Martirosian, C. (2020). A capital idea: Exploring the relationship between human and social capital and student achievement in schools. *Journal* of Professional Capital and Community, 6(1), 7–28. 10.1108/JPCC-10-2020-0082.
- Ehren, M. C. M., Madrid, R., Romiti, S., Armstrong, P. W., Fisher, P., & McWhorter, D. L. (2021). Teaching in the COVID-19 era: Understanding the opportunities and barriers for teacher agency. *Perspectives in Education*, 39(1), 61–76. 10.18820/2519593X/pie.v39.i1.5.
- Fox, A. R. C., & Wilsonn, E. G. (2015). Networking and the development of professionals: Beginning teachers building social capital. *Teaching and Teacher Education*, 47, 93– 107. 10.1016/j.tate.2014.12.004.

Fullan, M. (2016). Amplify change with professional capital. Journal of Staff Development, 37(1), 44–56.

- Fullan, M., Rincón-Gallardo, S., & Hargreaves, A. (2015). Professional capital as accountability. Education Policy Analysis Archives, 23(15), 1–18. 10.14507/epaa.v23.1998.
- Harb, S., & Karami-Akkary, R. (2021). Lebanese conceptions of effective school leadership: A cross-cultural analysis. *International Journal of Leadership in Education*, 24(1), 126– 144 10 1080/13603124 2019 1613564
- Hargreaves, A. (2021). Austerity and inequality; or prosperity for all? Educational policy directions beyond the pandemic. *Educational Research for Policy and Practice*, 20, 3–10. 10.1007/s10671-020-09283-5.

Hargreaves, A., & Fullan, M. (2012). Professional capital: Transforming teaching in every school. Teachers College Press.

- Hargreaves, A., & Fullan, M. (2020). Professional capital after the pandemic: Revisiting and revising classic understandings of teachers' work. *Journal of Professional Capital* and Community, 5, 327–336. 10.1108/JPCC-06-2020-0039.
- Hollweck, T., & Doucet, A. (2020). Pracademics in the pandemic: Pedagogies and professionalism. Journal of Professional Capital and Community, 5, 295–305. 10.1108/JPCC-06-2020-0038.
- Leana, C.R. (.2011). The missing link in school reform. Stanford Social Innovation Review. Retrieved March 27, 2021, from https://ssir.org/articles/ entry/the_missing_link_in_school_reform#
- Mattar, D. M. (2012). Factors affecting the performance of public schools in Lebanon. International Journal of Educational Development, 32(2), 252–263. 10.1016/j.ijedudev.2011.04.001.
- Miles, M., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Sage Publications.

Minckler, C. H. (2014). School leadership that builds teacher social capital. Education Management Administration & Leadership, 42(5), 657–679. 10.1177/1741143213510502.

- Ng, P. T. (2021). Timely change and timeless constants: COVID-19 and educational change in Singapore. Educational Research for Policy and Practice, 20, 19–27. 10.1007/s10671-020-09285-3.
- Nolan, A., & Molla, T. (2017). Teacher confidence and professional capital. Teaching and Teacher Education, 62, 10–18. 10.1016/j.tate.2016.11.004.
- Patton, M. Q. (2002). *Quality research & evaluation methods* (3rd Edition). Thousand Oaks, CA: Sage.

- Pil, F. K., & Leana, C. (2009). Applying organizational research to public school reform: The effects of teacher human and social capital on student performance. Academy of Management Journal, 56(2), 1101–1124. 10.5465/AMJ.2009.47084647.
- Podolsky, A., Kini, T., & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of US research. *Journal of Professional Capital and Community*, 4(4), 286–308. 10.1108/JPCC-12-2018-0032.
- Pyhältö, K., Pietarinen, J., & Soini, T. (2014). Comprehensive school teachers' professional agency in large-scale educational change. *Journal of Educational Change*, 15, 303–325. 10.1007/s10833-013-9215-8.
- Reed, R., & Eyolfson, J. (2015). Don't just survive Thrive! Develop professional capital to help teachers thrive in times of great change. *Journal of Staff Development*, 36(6), 38–46.
- Sahlberg, P. (2020). Will the pandemic change schools? Journal of Professional Capital and Community, 5, 359–365. 10.1108/JPCC-05-2020-0026.
- Sahlberg, P. (2021). Does the pandemic help us make education more equitable? Educational Research for Policy and Practice, 20, 11–18. 10.1007/s10671-020-09284-4.
- Strom, K. J., & Viesca, K. M. (2020). Towards a complex framework of teacher learning-practice. Professional Development in Education, 47(2–3), 209–224. 10.1080/19415257.2020.1827449.
- Talaee, E., & Noroozi, O. (2019). Re-conceptualization of "digital divide" among primary school children in an era of saturated access to technology. *International Electronic Journal of Elementary Education*, 12(1), 27–35. 10.26822/iejee.201/9155334.
- Tong, W., & Razniak, A. (2016). Building professional capital within a 21st century learning framework. *Journal of Professional Capital and Community*, 2(1), 36–49. 10.1108/JPCC-06-2016-0018.
- Vähäsantanen, K., Raikkonen, E., Paloniemi, S., Hokka, P., & Etelapelto, A. (2019). A novel instrument to measure the multidimensional structure of professional agency. *Vocations and Learning*, 12, 267–295.
- Winthrop, R. (2020), Perspectives in Education during the Pandemic, [webcast], April 9, available at: Https://www.facebook. com/100003938622423/videos/1618265101648095
- Wiswall, M. (2013). The dynamics of teacher quality. Journal of Public Economics, 100, 61–78. 10.1016/j.jpubeco.2013.01.006.

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