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Travel live-streaming empowerment amid crises: a processual and psychological view

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ABSTRACT

The recent pandemic has restricted global mobility, thus necessitating new technology to be used to enable new forms of travel, e.g. travel live-streaming (TLS). While the prosperity of TLS has fuelled tourism industry economically, little is known about how it can psychologically empower its participants during crises. This research thus, from a processual view, explores the psychological empowerment stages enabled by TLS. By using a netnography approach, audio data derived from 28 travel live streams were collected over two years (2020–2022). Based on the empowerment theory, the findings propose a psychological empowerment process framework and reveal three processive stages of intrapersonal (initialization), interpersonal (participation, influence and control) and relational (interdependence) to develop such empowerment among TLS stakeholders. This study thus contributes to the psychological empowerment theory by identifying its progressive construct and emphasizing the unique role of relational stage, enabled by TLS. It also provides novel insights for TLS stakeholders to seek coping strategies in a powerless situation.

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Introduction

Travel live-streaming (TLS) is no longer a novelty and has penetrated the heart of tourism industry in increasing economic transactions. TLS emerged as a new travel trend during the pandemic crisis (Liu et al., 2022) and involves multiple stakeholders of streamers, viewers, platforms and sponsors (Deng et al., 2021). TLS stakeholders are increasingly exposed to TLS in ways of experience-sharing, destination marketing and travel product sales. Specifically, TLS has helped the tourism industry attracted interests and increased bookings during the pandemic (Qiu et al., 2021). In 2021, by collaborating with 3000 stakeholders, *Ctrip* has live-streamed over 33,000 travel products from 200 domestic and international destinations, attracted around 200 million pre-booked trips (Travel Weekly China, 2022). By 2021, the global engagement of live streaming has reached 550 billion hours and attracted 470 million people to watch TLS (Lai, 2022). TLS can provide real-time interactions without physical and spatial limitation (Deng et al., 2022). It, therefore, has become an online playground to fulfil people's needs for travel.

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The pandemic crisis amplifies TLS application in tourism. Before the pandemic, individuals (travel influencers and tourists) are the major players engaged in TLS communities. This has changed when psychological stress has been escalated caused by restrained activities and monotonous routines during the pandemic. More and more tourism stakeholders actively participate in TLS communities, such as destination marketing organization (DMO), online travel agency (OTA) and tourism organizations, because TLS enables abundant opportunities for them to flexibly produce content online and build engaged relationships with tourists. Streamers can control tangible (money and followers) and intangible resources (public attention and network connectivity) to engage viewers. Both streamers and viewers can shape others' thoughts and behaviours through a stronger dependent relationship. Thus, TLS is a valuable non-institutional form of power exchange that stimulates the shifting of power dynamics in social development.

While TLS has been offering a digital solution to drive tourism economy during the pandemic, how it could empower TLS stakeholders remains uninvestigated. **Psychological empowerment** denotes people's internal state of enabling actions to reach goals, consisting of intrapersonal and interpersonal levels (Zimmerman, 1995). At the intrapersonal level, individuals perceive their confidence, self-esteem and efficacy in their capabilities to achieve desired outcomes. At the interpersonal level, individuals use their cognitive understanding to aware the resources available to them and use the resources to achieve goals (Pacheco & Coello-Montecel, 2023). Moreover, empowerment postulates two constructs, namely empowered (as an outcome) and empowering (as a process). The former reflects the cognitive state of people's beliefs on competence, while the latter describes people's efforts to develop critical awareness, participate in decision-making, access resources and gain control of their social environment (Li, 2016).

In this study, TLS's highly interactive and temporal affordances enable us to adopt a processual view of psychological empowerment to investigate **the changing process** of awareness, resources, relationships among TLS stakeholders. From this perspective, we raise the research question: *How does TLS psychologically empower its stakeholders amid crises?* We address the research question by adopting the netnography method to abstract TLS audio data from live-streaming platforms. The novelty of this study includes: (1) we used psychological empowerment to explain new interdependent relationships among tourism stakeholders in online platforms during crises; (2) we explored a crisis-related online empowerment process to help reveal a smooth transition from physical tourism to virtual tourism, which is one of the future tourism trends (Lu et al., 2022).

Methodology

This study takes a netnography approach to explore the evolution of psychological empowerment among stakeholders using the pandemic crisis as a study context. TLS on *Douyin*, *Ctrip*, *Fliggy* were chosen as research sites because they attract a high volume of traffic with popularity, collaborate with a wide array of TLS stakeholders and offer various live-streaming functions (e.g. connecting-live, a function which enables two or more streamers jointly broadcast a live to interact with viewers). The researcher 'hang-out' (Jeffrey et al., 2021) in the selected platforms and lurked to trace TLS activities to collect audio data of streamers' oral narratives during live-streaming (from January 2020 to February 2022). Similar methods could also be used in tourism research to study user experience of watching videos from remote locations (e.g. Palos-Sánchez et al., 2020).

Purposive sampling was used to select informants, considering TLS activities that were produced: (1) during pandemic in a prolonged manner and (2) by heterogeneous stakeholders. Streamers' biographic information and posting frequency were also obtained from the platform. Oral narratives were collected to reflect interactions among stakeholders, covering 28 streamers, 6464 minutes of videos and transcribed on 518 pages (Table 1). Data were thematically analyzed through two cycles of combining the deductive and inductive approaches following the theory of psychological empowerment (see the Appendix).

Table 1. A summary of sample profile.

Live streamer	Followers	TLS content	Involved stakeholders	Source of data (platform)	Produced time
January to June 2020					
@ Nono/travel live streamer/Male	3M	Global travel memory – Q&A	Travel influencer	Douyin	02/02/2020
@Boss-Live/Online travel agency	1M	Sanya Hotel	Two live streamers	Ctrip	23/03/2020
@ Xunjia/travel live streamer/A couple	85K	Travel memory of Scotland	Travel influencer	Douyin	11/04/2020
@ Mrha//Male	28K	Global travel souvenirs sharing	Two Travel influencers	Douyin	01/05/2020
@Versailles/tourism site	10K	Virtual travel in Versailles	Online travel agency	Fliggy	14/05/2020
@Little sister/travel live streamer/Female	2M	Places recommendation for driving tourism	Travel influencer	Fliggy	01/06/2020
@\ Linshigo/travel live streamer/Female	4M	Visit Panda Park in Chengdu	Travel influencer	Douyin	24/06/2020
@TheBritishMuseum/tourism organization	11K	Virtual travel to The British Museum	Tourism organization and Online travel agency	Fliggy	30/06/2020
July to December 2020					
@ Cici/travel live streamer/Female	2.1M	Virtual travel to The British Museum	Online travel agency	Douyin	14/07/2020
@ BossLive/Online travel agency	1M	Travel back to Wuhan	Two live streamers	Ctrip	19/08/2020
@ Travelalong/ travel live streamer/Female	3.1M	Visit Potala Palace	Travel influencer and viewer	Douyin	04/09/2020
@ The Louvre	20K	The debut of Louvre	Online travel agency	Fliggy	22/09/2020
@Vienna	108K	Virtual travel to Vienna	Destination marketing organization and online travel agency	Douyin	24/11/2020
@Little sister/travel live streamer/Female	30K	Travel to Macau	Airline and destination marketing organization	Douyin	08/12/2020
January to June 2021					
@ Cici/travel live streamer/Female	2.3M	Spring festival in Chengdu	Travel influencer	Douyin	28/01/2021
@Xunjia/travel live streamer/couple	21K	Winter trip to Yellow Mountain	Destination marketing organization	Douyin	03/02/2021
@Joe/travel live streamer/Male	1.4M	Shanghai Disneyland	Travel influencer	Douyin	14/04/2021
@Queensland-tourism	18K	Family trip in Brisbane	Destination marketing organization	Ctrip	03/05/2021
@NKU/travel live streamer/Male	2.1M	Camping trip	Travel influencer	Douyin	30/05/2021
@ Litleseven/travel live streamer/Female	468K	Explore food in Xian city	Travel influencer	Douyin	06/06/2021
July to December 2021					
@lamzhua/travel live streamer	100K	Film tourism in Japan	Online travel agency	Ctrip	04/07/2021
@Joe/travel live streamer	1.6M	Hotel selection tips in Sanya	Travel influencer and hotel	Douyin	27/07/2021
@Visit-Portugal/Destination marketing organization	1M	Virtual travel to Lisbon	One live streamer	Douyin	22/08/2021
@Gangontheway/travel live streamer	768K	A food trip in Korea	Travel influencer	Douyin	05/09/2021
@Yaya/travel live streamer	531K	Travel tips sharing	Travel influencer	Douyin	12/11/2021
@Spanishmiya	2.2M	Stroll in the city of Cordoba	Travel influencer	Fliggy	02/12/2021
January to February 2022					
@Tlife2/travel live streamer	1M	Virtual travel to Europe	Travel influencer	Douyin	21/01/2022
@JNTO/ Destination marketing organization	932.5K	Explore fun activities in winter Japan	Travel influencer and other live streamers	Douyin	07/02/2022

Table 2. Key findings and illustrative quotes.

Stages	Process	Focal state/ behaviours	Quotes	Travel live-streaming content	TLS stakeholders involved
Intrapersonal stage	Initialization	Powerless	'I have nothing to do recently but staying at home. I have been continuously on my way to travel. The current lockdown makes my life quite different compared with before' (#2).	Travel memory Q&A	• Travel influencer
		Self-efficacy	'I somehow appreciate the lockdown that allows me to take a rest and rethink how I can produce better TLS contents. At least, I can still connect with you via live stream, using the very directive way to discuss our future travel plans, to cherish the previous travel opportunities that we could have to see the world' (#3).	Travel memory of Scotland	• Travel influencer
Interpersonal stage	Participation	Storytelling	'It's been a while to talk with you guys via live ... Today will be a bit different. Since we are currently staying at home, all my travel plans have been interrupted ... So, I want to use some souvenirs that I bought from different countries to share a few of prior travel experiences. Some stories I did not share in my live streaming before' (#4).	Global travel souvenirs sharing	• Travel influencer
		Information sharing	'I invited three guests to join my live today, they are the destination marketing organisation managers from Wuhan, Sichuan, and Yunnan. I know many of us are eager to travel ... They will join us later to share the most updated travel information' (#6).	Places recommendation for driving tourism	• Travel influencer • Destination marketing organisations
	Influence	Stakeholders' collective action	'Hello friends from all over the world ... We cannot believe we finally made this happening ... It is the first time, us, the British Museum holds a travel live-streaming. Great thanks to Fliggy, who provides us the platform. It is our collective efforts to made it' (#9).	The debut of Louvre	• Tourism organization • Online travel agency
		Viewers' decision-making	'Preparing for this TLS is like creating an intimate and personalised tour, planning the route and content. You may never see a vacant British Museum before. Today, I will guide you to the Rosetta Stone, Egyptian mummies, and the Parthenon Frieze. Beyond the digital visiting tour, viewers are allowed to purchase products directly through our live channel' (#11).	Virtual travel to The British Museum	• Tourism organization • Online travel agency
	Control	Mobilize resources	'We barely travel this year, but let's see the world together in live ... I prepared gifts for you, which are kindly sponsored by Shanghai Disneyland. So, please continue to interact with me, and I will screenshot later to give the gifts' (#16).	Family trip to Shanghai Disneyland	• Travel influencer • Tourism attraction • Destination marketing organization

(Continued)

Table 2. Continued.

Stages	Process	Focal state/ behaviours	Quotes	Travel live-streaming content	TLS stakeholders involved
		Control engagement	'Please pay attention to the lucky draw. I will set up three lucky draws during the live today. You may have a chance to win one ticket that sponsored by Macao Airline' (#20).	Travel to Macao	<ul style="list-style-type: none"> • Travel influencer • Destination marketing organization • Airline
Relational stage	Interdependence	Shared consciousness	'In such tough time, it is great to connect with our Vienna DMO to produce today's live stream and guide our viewers to see the world. I am sure Vienna is well-prepared to welcoming our viewers to visit ... I can see from the comments that many of our reviewers are dreaming about their Vienna travel, hopefully in the near future' (#23).	Virtual travel to Vienna	<ul style="list-style-type: none"> • Destination marketing organization
		Emotional attachment	'This is a lucky viewer; I invite her to join my trip this time. We are like travelling friends for an exciting adventure after a long staying home break, right?' (#25).	Visit Petal Palace	<ul style="list-style-type: none"> • Travel influencer • Viewer

Findings

Our key findings are summarized in Table 2 which provides illustrative quotes for each theme generated from data analysis. First-order themes were generated as focal state/behaviours to summarize narratives found from TLS data. These behaviours were then observed on their connections and further categorized under same higher-order themes of empowerment process. Importantly, we identified two new processes from our data, namely ‘initialization’ and ‘interdependence’, which have contributed to the existing framework of empowerment (see Table 2).

Based on Table 2 results, a progressive psychological empowerment process of TLS in crises was found over three stages: (1) *intrapersonal stage* (streamers obliged to address psychological status to cope with negative changes), (2) *interpersonal stage* (streamers obliged to interact with viewers and other travel live-streaming stakeholders to retain power) and (3) *relational stage* (the formed mutual dependence involves adapting and integrating empowerment in a changing environment). This is further demonstrated in the flow chart of Figure 1.

Intrapersonal stage

The **initialization** process is formulated with two steps: powerlessness and self-efficacy. For streamers, the crisis-induced mobility restrictions meant cancelling or postponing travel live-streaming production that can lead to their further anxiety. Environmental uncertainty can pose *powerlessness*, alienation and helplessness to streamers. To cope with this and maintain relationship with viewers, some streamers chose to adapt their usual TLS contents to indoor travel-related experiences/memories sharing or to discuss future travel plans with viewers. These actions are generated by *self-efficacy* that encompasses motivations towards continual TLS production.

Interpersonal stage

The interpersonal stage is reflected by TLS restoration activities via three psychological empowerment processes emerged: **participation, influence and control**.

Participation refers to what streamers do to interact with viewers through *storytelling* and *information sharing*. The former is essential to produce TLS because streamers have developed the capability from prior experiences. Some streamers use souvenirs to remember their prior travels and the behind-the-scene stories that have not been captured in TLS. Furthermore, after COVID-induced travel restrictions have been lifted, streamers become more active than in the intrapersonal stage to *share updated travel information*. Mostly, they invite destination marketing organizations to join live and share information.

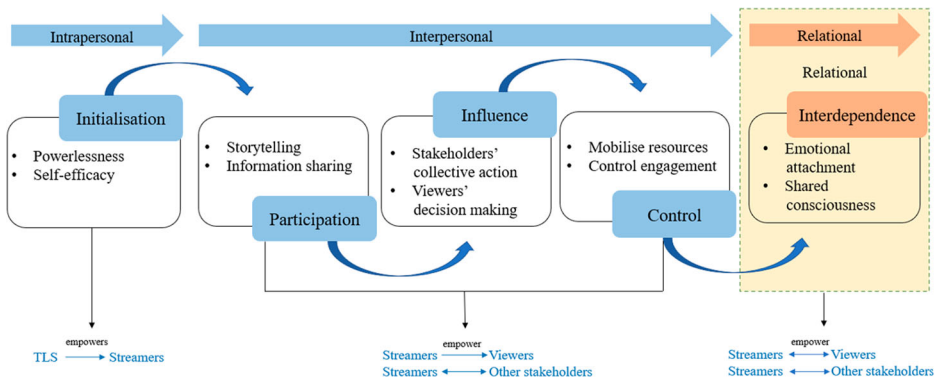


Figure 1. Psychological empowerment process in travel live-streaming.

Influence refers to *TLS stakeholders' collective actions* to influence each other and viewers for *decisions-making* (e.g. travel planning). The popularity of TLS during crises has attracted more people to join the platform. A good example is the British Museum, which collaborated with *Figgy* (online travel agency), to debut TLS through its vacant galleries in July 2020. The British Museum helped *Figgy* to attract a high volume of users to the platform, while *Figgy* provided the online platform and its users with museum to broaden their visit scope, drive revenue and most importantly, maintain connection with online viewers to influence their future travel plans.

Control refers to how streamers *mobilize resources* for TLS production and *control viewers' engagement*. Such control is evident in the newly developed form of *connecting-live*. On the one hand, streamers use *connecting-live* to invite other streamers or stakeholders (e.g. tourism destination organizations and airline) to co-create the live content. Its production thus shifts from one-to-many (one streamer to viewers) to a many-to-many (streamers-to-viewers) pattern, by mobilizing more resources and triggering higher engagement. On the other hand, the streamers implement 'lucky draws' for viewers to win tourism-related products (e.g. airline tickets, tourist attraction tickets), thus controlling viewers' engagement.

Relational stage

At the later crisis stage, TLS-enabled tourism experience gradually became a new norm. The relational stage reflects the 'mutual dependence' described within interdependence theory (Arriaga, 2013), which imbues the relationships among TLS stakeholders.

First, empowerment can be gradually developed through *shared consciousness*, in that streamers and viewers share the same attitude, beliefs and perceptions about overcoming a tough situation. Viewers are willing to connect with streamers who, in turn, are also eager to understand what viewers expect to watch in following TLS, particularly during crisis when mobility is a concern.

Second, *emotional attachment* is formed between streamers and viewers. Live-streaming interaction stimulates a sense of belonging and connection to accommodate self in a crisis environment. Streamers attach emotions to produce contents and involve viewers to be part of their life. Meanwhile, viewers also psychologically support streamers through interactions. The emotional attachment between streamers and viewers reflects the 'mutual dependence' among many within the online community. Some streamers strive to engage viewers to inspire positivity and build community ties during crises.

Discussion and conclusion

This study reveals that TLS can enable psychological empowerment on stakeholders over three stages: **intrapersonal, interpersonal and relational**. Stakeholders experienced powerlessness at the start of the pandemic before being motivated to evaluate their capabilities. Interpersonal connection appeared when participation, influence and control were performed to mobilize resources and to actively engage more than before. **Relational interdependence** occurred when streamers and viewers shared similar consciousness, thus empowering each other, until eventually offering emotional attachment within their social groups. The three stages illustrate how technology can hold power to strengthen TLS stakeholders' capabilities in a crisis environment.

These findings contribute to the psychological empowerment theory by confirming the participation, influence and control elements found in the literature (Schweitzer & Simon, 2021), while arguing that each occurs as process stages that build on each other. Notably, the findings reveal a new relational stage, which extends the current framework of psychological empowerment process (Christens, 2012). The relational stage is built heavily on the interdependence established between streamers and viewers, which further contributes to psychological empowerment theory by elaborating 'interdependence theory' (Johnson & Johnson, 2005) to enlighten the relational network and mutual dependence relationship among stakeholders in the digital era. This study

extended the understanding of psychological empowering relationships between TLS streamers and other stakeholders, which extends existing knowledge that only studied TLS stakeholders as a whole enabled by TLS affordance (Deng et al., 2021) or examined multiple TLS stakeholder topics individually under the pandemic (Liu et al., 2022). This study has contributed significantly to the existing body of research on travel live streaming (TLS), as exemplified in works by Zheng et al. (2022) and Yang et al. (2022), by examining the behaviour of TLS stakeholders through the lens of psychological empowerment. In addition, by incorporating audio data, our research underscores the importance of leveraging innovative technological sources, as exemplified by the work of Palos-Sánchez et al. (2022), to uncover novel insights and information from a unique perspective.

This study provides applicable contributions for stakeholders to consider what strategies can be adopted in different empowerment stages. First, in the intrapersonal stage, they can cope with a negative psychological status (i.e. powerless) by improving their understanding, self-confidence and emotional stability. Second, in the interpersonal stage, stakeholders can consider innovative ways to produce TLS and use available resources to influence others, such as the three-way collaboration among destination marketing organization, online travel agency and travel streamers. Developing mutual networks is important to overcome future challenges. Third, in the relational stage, TLS stakeholders should be aware of, and seek support from others to nurture their shared relational network.

This study has some limitations, showing the potential for future research. First, our work is set on psychological empowerment, but empowerment is a multi-dimensional construct and tourism consumption has diversified from a physical destination to virtual or hybrid mode. Future research can investigate how TLS can empower tourism stakeholders from economic, social or political perspective. Second, this study used a qualitative method to explore a psychological empowerment process framework. Future research can use online experiment design to test the proposed framework.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Appendix. Data analysis flow chart and results generation

