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BRIDGING THE RESEARCH TO PRACTICE GAP:
CONTEXT MATTERS: UNDERSTANDING THE
LIFE CIRCUMSTANCES OF HISPANIC
RESIDENTS OF A CASINO NEIGHBORHOOD IN
SPRINGFIELD, MA

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## **Executive Summary**

**Purpose.** This study aims to lay the groundwork for a call to action for researchers and policymakers to incorporate the life experiences of members of under-resourced communities in their efforts to mitigate the harmful effects of problem gambling.

**Methods.** The study used a community-based participatory research (CBPR) approach within a qualitative descriptive exploratory research design involving a small purposive sample. The study consisted of three phases. The first phase was devoted to getting to know the community and building the research capacity to form a community research team (CRT) through participatory learning activities. Recruitment and capacity building assistance on the basics of research and problem gambling comprised the second stage. During the third and last stage of the study, the CRT conducted a variety of research activities that included formulating a method to map out gun violence incidents in their community, conducting interviews with community residents, and conducting visual analysis of the physical environment surrounding the MGM casino, located within their community.

**Findings.** Data analysis revealed a community besieged by numerous stressors throughout many life contexts, such as food and job insecurity, housing unaffordability, suicide, chronic disease, mental health problems, crime, unemployment, fear of becoming homeless because of the inability to pay rent, as well as the impact of the COVID- 19 pandemic.

**Discussion.** The study addressed three overarching questions:

- What characterizes the life context in which study participants reside?

  The data yielded a detailed and complex description of a textured life context.

  Ten characteristics of participants' life context were identified.
- We employed a community-level stress model to theorize a mechanism by which the life context of the respondents relates to gambling. Stress becomes chronic when ongoing adverse events overwhelm an individual's psychological, material, and biological resources. We hypothesized that Springfield residents experiencing chronic stress might visit a casino for distraction, to seek relief, to leave worries behind, and to escape an unpleasant reality, among other reasons.
- strategies to reduce the effects of problem gambling?

  The following strategies emerged from the contextual features identified in the study: incorporate a trauma-informed approach; use multi-level, multi-domain interventions; embrace culture; place matters; incorporate social support; and address racism.

V How can components of the life context be incorporated into successful

**Recommendations.** A community-level stress model lends itself to actions well aligned with a public health response. For instance, if the experience of stress entails the depletion of the person's material, psychological and biological resources because of the strains created by adverse life events, an appropriate solution— at the community level— would be to provide needed resources or strengthen existing ones to improve the community's ability to cope with such stress. The gaming network— the casino industry, state lottery, community leaders, and policymakers— has needed social, financial, and political capital to support interventions at multiple eco-systemic levels.

## Introduction

On November 22, 2011, Governor Deval Patrick signed An Act Establishing Expanded Gaming in the Commonwealth-legislation that allowed for the construction of three casinos, which was expected to "create thousands of jobs for Massachusetts residents in the areas of construction, hospitality, and tourism while also generating \$300-\$500 million in new revenue for the Commonwealth". <sup>1</sup> The Massachusetts Gaming Commission (MGC) is a five-member independent body created by the state legislature to guide the implementation of this expanded gaming law. The Commission was also charged with the development of an annual research agenda to understand the social and economic effects of expanding gaming in the Commonwealth and with carrying out a study on problem gambling, existing prevention, and treatment programs.<sup>2</sup> The MGC funded this study with the purpose of advancing understanding of the impact of the introduction of casino gambling in Massachusetts's communities through a community participatory mechanism. The study focuses on Hispanics/Latinos<sup>3</sup> living in Springfield, MA, a host casino community. Among all Massachusetts racial and ethnic groups, Hispanics represent the largest number of people living under the poverty level<sup>4</sup>. The voices, experiences, and perspectives of marginalized populations have a very limited presence in the field of gambling and problem gambling research. (Ortiz, 2017; Ortiz & Hernández, 2019; Ortiz et al., 2021). It is known that communities of color are disproportionately affected by gambling. Further, problem gambling is also directly associated with social and economic conditions that shape the lives of folks in poor communities, namely social, educational, and economic disadvantages. (Alegría et al., 2009; Hahmann et al., 2020; Hahmann & Matheson, 2017; Ortiz & Hernández, 2019; Welte et al., 2015) This dearth of knowledge about the roles of race and ethnicity in gambling among marginalized populations has resulted in an incongruous state of affairs for gambling researchers and policymakers: knowledge is lacking about the populations that are more likely to experience disproportionate negative consequences from gambling

<sup>&</sup>lt;sup>1</sup> https://massgaming.com/about/expanded-gaming-act/

<sup>&</sup>lt;sup>2</sup> https://massgaming.com/the-commission/mission-values/

<sup>&</sup>lt;sup>3</sup> The terms "Hispanic" and "Latino(s)" will be use interchangeably to denote Hispanics or Latino refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.

<sup>&</sup>lt;sup>4</sup> https://www.kff.org/other/state-indicator/poverty-rate-by-raceethnicity/?dataView=1&currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

and problem gambling. The exclusion of sociocultural perspectives and experiences of members of disadvantaged groups from this research and policymaking leaves out a fundamental component when designing much-needed evidence-based interventions to reduce the risk of gambling: the life context that may be contributing to problem gambling. The lack of knowledge about the life context of those impacted by gambling and problem gambling also limits the discourse on the mechanisms by which social determinants of health result in health inequities. The purpose of this study is to lay the groundwork to nudge researchers and policymakers into resolute efforts to incorporate into their work the life experiences of members of oppressed and under-resourced communities in relation to gambling and problem gambling.

# Importance of including contextual variables in research studies and social interventions

Implementation sciences have long advocated for the inclusion of context in developing cost-effective, evidence-based interventions that work for everyone. (Craig et al., 2018; Daniels, 2018; Edwards et al., 2014; Nilsen & Bernhardsson, 2019). In fact, implementation scientists point out that a large percentage of preventive therapies that succeed in clinical trials or laboratories fail in real-world settings (Tyler, 2018). In addition, the lack of understanding of the context where implementation will happen contributes to the long delay (up to 17 years) in moving evidence-based interventions from a research setting to the community for implementation (Morris et al.,2011).

The inclusion of context in research studies and policy interventions contributes to the creation of "more appropriate, implementable, effective, and sustainable interventions that either work well in a specific context or have sufficient flexibility built into their design to work across a range of contexts" (Craig et al., 2018). In addition, it:

- Y Helps explain how an intervention works or why it fails
- Y Yields an explanation of causes of differential impact across race, gender, ethnicity
- Y Facilitates the replicability and sustainability of interventions.
- Y Ensures alignment with the priorities of the community
- Y Engages key community stakeholders who will lead and champion an intervention.

In this study, we focused on the concept of life context. As employed in this study, it refers to the physical and psychosocial features of the places where people live (i.e., housing, neighborhood), work (i.e., employment), and play (i.e., entertainment). Context is the stage where social determinants of health, culture, and behavior play out. This context also includes elements of culture, history, and the intersection of individual and environmental factors that are likely to shape the gambling experience of those living in those settings.

### The study population

This community-based participatory study represents a modest effort at closing the knowledge gap about the relationship between gambling and the life context of Hispanics living in Springfield, Massachusetts, one of the Commonwealth's casino host communities. Located in Western Massachusetts, Springfield is the second-largest city in the state and is the seat of Hampden County. Most Hispanics living in Springfield are Puerto Rican. Many of them live in or in proximity to the poorest zip code in the Commonwealth, as Springfield sits in Hampden County, which also reports the poorest health outcomes among Massachusetts residents. <sup>5</sup> In 2010, Springfield's Hispanic population was the most segregated in the United States. <sup>6</sup> Springfield's residents have also endured numerous adverse events throughout the decades, including redlining<sup>7</sup> in the 1930s, the Puerto Rican riots in the 1970s<sup>8</sup>, and a tornado in 2011<sup>9</sup>. The city has also earned unwanted designations such as the asthma capital of the United States and the second most segregated school district in the nation for Hispanics<sup>10</sup> and the most segregated city in the nation for Hispanics. <sup>11</sup>Few communities in the United States experience as many adversities as those faced by the Hispanic community in Springfield.

In recent years, the MGC has sponsored several studies in Springfield that shed light on the socioeconomic conditions of the city as it relates to the presence of the MGM casino. Salient findings from these previous studies include the following:

*Employment*<sup>12</sup>:

- Y Residents from other towns hold 60 percent of the jobs in Springfield.
- Y In 2013, the unemployment rate in Springfield was 11.1 percent, markedly higher than the Massachusetts rate of 7.1 percent.

<sup>&</sup>lt;sup>5</sup> https://www.publichealthwm.org/what-we-do/coalition-building/chip

<sup>&</sup>lt;sup>6</sup> https://www.psc.isr.umich.edu/dis/census/segregation2010.html

<sup>&</sup>lt;sup>7</sup> https://www.springfield-ma.gov/planning/fileadmin/community\_dev/Fair%20Housing%20AI%20FINAL.pdf

<sup>8</sup> https://www.newenglandhistoricalsociety.com/new-englands-forgotten-puerto-rican-riots/

<sup>9</sup> https://storymaps.arcgis.com/stories/272ead74dfe348a4a0f10b3b619c9003

<sup>&</sup>lt;sup>10</sup> https://www.masslive.com/news/2010/09/segregation in springfied boston massachusetts schools.html

<sup>&</sup>lt;sup>11</sup> http://www.censusscope.org/2010Census/FREY2010HSP100MetroSeg.xls

 $<sup>^{12}\</sup> https://massgaming.com/wp-content/uploads/Host-Community-Economic-Profiles$ 

### Crime most likely influenced by the casino $^{13}$ :

- Y A fairly small increase in drunk driving.
- Y An increase in shoplifting and other crimes at 24-hour facilities in the immediate block of the casino, including a CVS pharmacy and a Pride gas station.
- V Increases in traffic-related complaints in some communities and along Interstate Highways
- Y An increase in criminal activity at Union Station in Springfield.

### Economic Impact by Casino<sup>14</sup>:

- V Upon opening, MGM Springfield employed just over 3,000 employees, and this number fell by over 30 percent over the course of MGM Springfield's first year of operation.
- Y Three-quarters of MGM Springfield workers held full-time positions at the casino.
- Y The majority of MGM Springfield's employees live in the Pioneer Valley region of Massachusetts (i.e., the portion of the Connecticut River Valley located in Massachusetts which corresponds to Springfield), with the remainder of workers are mostly located out of state, primarily in Northern Connecticut.
- Y MGM Springfield employees living in the Pioneer Valley had a lower average hourly wage than employees living in other places, which might be explained by a concentration of lower-wage workers living closer to the casino and in Springfield.
- Y Payroll employment, visitation, and gaming revenue have fallen since the opening of the casino.

## Purpose of the study

The purpose of this qualitative study was threefold:

- 1) to describe the life context of Hispanic individuals residing in Springfield, Massachusetts, and its relevance towards mitigating problem gambling;
- 2) to find ways to incorporate the voices of Hispanics, a group disproportionately impacted by problem gambling in the design of evidence-based interventions, and
- 3) to propose a theoretical approach aligned with the way contextual life factors influence problem gambling.



# Theoretical approach

This study borrows elements from the socio-ecological theory of prevention (Bronfenbrenner, Urie 1979) and implementation science. The socio-ecological theory recognizes that behavior is affected and subsequently displayed in multiple contexts (referred to as "ecological systems" in the parlance of socio-ecological theory) that include three systems: the individual (and family), community, and society. Within a socio-ecological approach, these systems are interconnected and impact one another. For example, a person's or a community's well-being is seen as the result of numerous effects and interactions happening among various systems or contexts, including people, families, communities, and the political landscape. When applied to the study of problem gambling, the socio-ecological approach acknowledges that the effects of problem gambling extend beyond the individual and could also impact the family, workplace, and community in which the participants live. Thus, in this study, we explored the relationship between problem gambling and contexts such as the family, work, housing, and neighborhood.

Implementation sciences is the field of study that delves into how to bridge the gap between what is known by science and what can be done or implemented by practitioners. In other words, it is concerned with identifying strategies to bring evidence-based interventions from the research setting to the community. Implementation science aims at answering questions such as: what works, how it works, for whom, and under what contextual circumstances (Roger, Fitzpatrick & Conner, 2012; Squires et al., 2019).

## Methods

The study used a community-based participatory research (CBPR) method within a qualitative descriptive exploratory research design, which involves the use of purposive small samples. The integration of CBPR methodology into the chosen research design serves two purposes: it is aligned with the Massachusetts Gaming Commission (MGC) mission of involving communities, and it is the recommended methodology for understanding a research subject from the perspective of individuals who are touched by

the problem (Tremblay, Martin, McComber, et al., 2018). Accordingly, CBPR gives voice to members of a community who have endured and resisted structural racism and its many consequences for generations. The community members of the research team have been affected by the presence of the casino (located in their neighborhood) and the negative consequences associated with gambling. The study's direction and boundaries were defined by the lead investigator. The exact research questions, however, were fine-tuned by the team of community researchers hired for this project.

The study consisted of three phases. The first phase (months 1-6) was devoted to getting to know the community. This process involved reviewing community needs assessments conducted in the past and other archival publications. The team also contacted community leaders and reached out to residents, inviting them to participate in this study. All these efforts culminated with the involvement of Neighbor to Neighbor, Inc. (N2N), a social justice organization dedicated to advocate for the rights of disenfranchised residents. N2N facilitated the recruitment and engagement of what turned out to be the community research team (CRT).

The second phase (months 7-12) began with the recruitment of the eight (two men and six women) community residents to form the CRT. They met with JSI staff on a weekly basis for one-to-two-hour sessions for 3 consecutive months. The meetings took place at N2N facilities, and each participant was compensated \$20 per hour. The goal of this phase was to build the research capacity of the CRT through participatory learning activities. The capacity building activities were delivered using five modules: Basics of Research; Introduction to Problem Gambling; The Social and Economic Impacts of Gambling in Massachusetts (SEIGMA) study; Responsible Gambling; and The Social History of Springfield. At the end of the second phase, the CRT selected a research topic that they wanted to add to the study. The topic they chose was an exploration of community residents' beliefs, perceptions, and life experiences related to gambling.

The CRT spent the next 8 months implementing research activities. During this stage the CRT conducted a variety of research activities that included devising a method to map out gun violence incidents in their community, interviews with community residents, and a visual analysis of the physical environment surrounding the casino. For the interviews, the CRT developed an interview guide and protocol and applied for IRB approval. They were granted an exemption because the inclusion criteria did not call for the participation of minors and there was no collection of personal identifying information.

## Sample description

The final sample consisted of 24 Hispanic residents of zip codes 01103 and 01105 in Springfield, MA. There were four males and 20 females, all over 18-year of age. They completed the Problem Gambling Severity Index Mini-Screen--a 3-item scale developed by Volberg and Williams (2012) derived from the original 9-item PGSI. The profiles yielded by this measure depicted ten respondents as non-gamblers, two as low-risk gamblers, three as moderate-risk gamblers, and one as a high-risk gambler. Four participants did not answer the profile.

### Sample selection and distribution

N2N provided contact information for all Springfield residents through their VAN software, the leadingpolitical campaigning technology provider to Democratic and progressive campaigns and organizations. This software is built on a database that contains voter registration contact information. The CRT compiled a list of 684 Hispanic residents of zip codes 01103 (where the MGM casino is located) and zip code 01105 (contiguous to 01103, and the poorest zip code in Massachusetts). The list was distributed among 4 CRT members. It took numerous calls of effort to recruit participants over the phone. Sometimes it took up to 60 phone calls to get one call answered. And often, that one person that answered would refuse participation.

At the onset of the interview, the participants provided verbal consent to both the interview and the recording of the interview for eventual transcription. The research team provided an overview of the content of the interview and notified the participants that they will receive a \$20 stipend upon completion of the interview.

Data collection took place in the Fall/Winter 2020-2021. During this period, the number of COVID-19 infections was beginning to climb and the epidemic was reaching its peak. At that time, Springfield, MA was also designated as a red/high-risk community.<sup>15</sup> All interviews were conducted over the telephone in Spanish and/or English by members of the Community Research Team during the Fall and Winter of 2020. Members of the CRT received formal training on the nature and purpose of the key questions and on how to conduct an interview. The interview script contained the following elements:

- Current concerns regarding their family, neighborhood, employment
- Dealing with COVID-19
- Perceptions of the MGM Casino
- Perceptions of Gambling
- How do they define Responsible Gambling?
- IRB approval

<sup>15</sup> https://www.springfield-ma.gov/cos/covid/city-of-springfield-covid-19-coronavirus-situational-timeline

# IRB approval

The JSI Institutional Review Board (OHRP IRB00009069 John Snow, Inc.) determined that this study is exempt from human subjects' oversight. The basis of this exemption is CFR 46.101 (b) (2), which covers survey activities without identifiers or sensitive questions that could result in harm; no participants in the study were younger than 18 years of age.

# Data analysis

The transcribed interviews were coded by Dr. Vega and Ms. Andrea Royo using MAXQDA, a mixed-method data analysis software program. The data coding process followed the six-step thematic analytical approach recommended by Braun & Clarke (2006). The first two steps involved becoming familiar with the data and generating initial codes. The third coding step entailed connecting codes to generate themes and clustering codes into layered themes. To illustrate, as shown in the textbox, the first theme that emerged was Overall Stress. Within that theme there were quotes related to family, neighborhood crime, and employment context. Those quotes were organized as subthemes within the main theme (Overall Stress). Within each subtheme (e.g., Stress within family context) there were other layers or subthemes (i.e., stress related to childcare, food insecurity and problem gambling). The final coding scheme emerged from a combination of a deductive approach (using codes developed in advance from interview guides) and an inductive approach (using open coding). Upon completion of the coding process, the senior qualitative researcher searched, reviewed, and defined themes. These themes are presented in the results section below.

#### Theme 1. Overall Stress

# **Subtheme 1.1 - Stress within family context**

- Childcare-related stress
- Food insecurity-related stress
- Problem gambling and relation to drug use as a longstanding problem in the family

# **Subtheme 1.2 - Stress related to neighborhood crime**

- Crime is a daily occurrence Stealing, prostitution, and shootings not far from casino
- Community members living in fear

# Subtheme 1.3. - Stress related to employment context

- Income loss
- Jobs available below living wage
- Job creation, low paying jobs

# **Subtheme 1.4 - Stress related to housing**

- Residents afraid of losing their homes due casino presence
- Home prices going up due to casino presence
- Fear of becoming homeless

## Data management

The interviews were audio-recorded and fully transcribed verbatim by a professional transcriber. The recorded interviews have no personal identifiers. Transcripts included speaker identification (i.e., interviewer and respondent, but no personal identifiers), repetition of phrases, overlapping speech, and interruptions. Transcribed data was saved as a Word document and then entered in MAXQDA, which assisted with coding and sorting of qualitative data. To ensure that the data collected is valid, reliable, and accurate, during the interview process, we probed for content and used paraphrasing and reflective listening techniques to confirm reports and understanding of the narratives provided by the respondents.

In the results sections below, we show salient quotes from the participants that exemplify the themes that emerged from the analysis. Because each quote is shown verbatim, it is literally unique to the person. However, the quotes represent clusters of meaning or illustrative themes of lived experiences and views shared by research participants.

## Results

The coding schema developed for this study was organized around four overarching themes: 1) Description of the life context of the respondents. This one theme comprises four subthemes (family, neighborhood, employment, and housing) 2) Perceptions and beliefs about gambling and problem gambling; 3) Presence of the MGM casino and 4) Experiences with COVID-19. Please note that the identified themes are not mutually exclusive. For instance, COVID-19 might impact employment which subsequently impacts the person's finances which simultaneously has an adverse impact on the well-being of the family.

Theme 1. Stress and trauma are pervasive in the respondents' life context, manifesting itself in the areas of family, neighborhood, employment, and housing.

Two respondents succinctly summarized and described the life context of people in the community. Their comments evoke an image of a community besieged by numerous stressors throughout many life contexts, such as food and work insecurity, housing, suicide, chronic disease, mental health problems, and crime. They perceived their current circumstances as a matter of life and death.

Theme: Overall Stress Interview Quotes

Stress infiltrates many contexts: food, work, housing	The stress is happening, the stress from the COVID, on food, on work, on housing, on all of these other things is compounding. And we have to be able to talk about it.  And as a community, we have to come together and say the past being strong men don't need that anymore. Our people are dying, our people are taking their lives. And we need to understand that just like we're now learning about taking care of diabetes, we need to learn to take care of our mental health and have not only the conversations but give people the language to be able to normalize supporting each other, supporting themselves to get that mental health help.
Stress is all pervasive	It's just the whole housing environment. Living in the projects, and all the crime, and all the people. It's just too much, so I guess as I get older and I'm getting my life together to get ready to get myself a house, just to get out of this area.

#### Subtheme 1.1: Family context

From the perspective of the respondents, all stressors ultimately affected the family. For instance, if a housing or employment issue was discussed, the respondent implied that the main concern was how it would affect the family. Unemployment was also a family stressor; some respondents lost their jobs and were afraid of becoming homeless because they were unable to pay rent. Regarding gambling, many participants mentioned how their family had a history of problem gambling, which affected the younger generation either positively (avoiding gambling activities all together) or negatively (association with problem gambling). Regarding the COVID-19 pandemic, participants were worried about the consistent stress of managing a pandemic. Specifically, they spoke about the impact of stress on their family related to homeschooling; managing online learning was a serious stressor for families.

Theme: Family Context	Interview Quotes
Problem gambling and relation to drug use as a longstanding problem in the family. The quote also depicts intergenerational aspects of problem gambling	Well, actually in my family, they had In my father's side of the family, they had two pass times. One of them was gambling on horses and numbers and the other was shooting heroin, right, sniffing and shooting heroin. So, a lot of my family was affected by AIDS, but because I knew this growing up, I avoided gambling. You know what I'm saying? And I avoided heavy hard drugs because of that. But my family basically still has habit and they still gamble, very heavily.
Stress of childcare	he wants to stop [working?] because of the stress of childcare, but then that's a financial burden to the family. A huge loss if she were to stop. So, for me personally, I'm okay right now.
Stress of food insecurity	For me, it's horrible, because if you think about it, just to get the money, just to get the food, sometimes you got to be asking other people, family members, just for food. You know what I mean?most of the time, you got to go places to get the food, like church and stuff like that. We got to go I asked my other family members for food so you can have in your house. You know what I mean? And most of these people that listen to us, and [inaudible projects, they can tell you about it. Everybody can tell you about it, just for the food supplies, and people are scared about the COVID-19, fighting over food and fighting over things.
Family losses due to COVID	I lost some family, some family survived, some friends.
Stress of crime in the neighborhood forcing families to move out of state	You know what I mean? And they're scared to say something They see something, they don't want to say whatever they see because it's guns, drugs, all type of stuff, police involved. And this is a tough neighborhood. That's the reason why some of my family move out from Springfield, Massachusetts to Pennsylvania.

## Subtheme 1.2: Neighborhood Crime

The main stressor present in the neighborhood context is crime—a participant perceived crime as a daily occurrence. The crime was characterized by stealing, sex work, shootings, break-ins, and drug use. Crime and drug use occurred quite close to the area regarding the casino. Below are specific quotes showing the relationship between neighborhoods and crime.

Theme: Neighborhood Crime Context	Interview Quotes
Crime is a daily occurrence	I feel like the crime, it's something that really happens daily.
Stealing, prostitution, shootings, not far from casino. Locus St as a hotspot	It's a little far from the new casino, but from Locust St. and down, you can see all these people walking back and forth, the same people every day, the same people every day, up and down selling stuff, stealing, prostitution. And what I live is, you got to live quietly. You cannot be saying, "Oh, this person shoot somebody." You got to be quiet in here. You can't even say anything to the police officer. "Listen, now, I see this person shooting," blah, blah, because they're hunting you down for it to kill you.
Community members live in fear.	So, that's why the whole neighborhood is scared to say something most of the time. Everybody's scared to say something, especially my neighborhood. You know what I mean? And they're scared to say something. They see something, they don't want to say whatever they see because it's guns, drugs, all type of stuff, police involved. And this is a tough neighborhood. That's the reason why some of my family move out from Springfield, Massachusetts to Pennsylvania. And even Pennsylvania is one of the worst places to live, anyways. But it's all depending where you live at. They're trying to do a better life. That's what they're trying to do.
Drug use continues away from the casino	Now in that area over there, they manicured the area, but I think that the substance abuse and all the crime that was there before continue to the same magnitude. The only thing is they have kept it away from the casino
Break-ins and substance use concerns among Latinos	So, I was very concerned about break in crimes, not so much in downtown because there's not physical home houses in that area. But further down into main street or up into state street, I live, yes, I'm closer to St. James, but it's a [hop] skip and a jumpliterally the exit is four blocks from my house. So, I was concerned about crime in that sense. In terms of health, I was concerned for particularly the community of color and Latinos, because alcoholism is very high.

Crime	Sometimes it was people on motorcycle. I mean, I never seen them, but I hear them, that there was a motorcycle and shooting the air, boom, boom, boom, boom. And then next thing you know, about a wink, somebody gets shot and killed, and this is crazy, because we got kids around. We got people, innocent people, walking around.] You know what I mean?
Drug activity, shootings, prostitution	That's another thing. That's another thing, about the crime scene, drugs, people walking back and forth with the drugs, drug activities everywhere, shootouts The neighborhood that I live right now is not a good neighborhood. I'm thinking about to move on, get myself either a house or something, something that I can feel safe, especially when I hang out. I hang out, like, in Belmont or Locust Street. That's one of the area you can see I don't want to say, because sounds awkward. I don't want to put any women down, because I don't like the way I look the women up there selling themselves, people Or either guys selling their women. It's crazy.
Prostitution, police doing their job	like I told you, down the hill, you see prostitution, police officers everywhere. I don't know if they're doing the right job or not. I'm [inaudible 00:19:48] going to leave everything to the police, but it's crazy, like where you can see a lot of things. So, it's nothing really changed. Everything going worse Everything going worse and worse and worse.
Break-ins	Yeah. We've noticed that since the pandemic there's been a lot more random break-ins in our neighborhood. A lot more petty crime going on in our city.

## Subtheme 1.3. Respondents are concerned about employment

The main concerns related to employment were low-paying jobs, general job loss and income reduction due to COVID-19.

Theme: Employment Interview Quotes

Many low paying jobs and part time opportunities available	Honestly, the job situation for our community is harsh. There's a lot of part-time, minimum wage jobs, but those are requiring two jobs to do that and, in the marketplace, now is a lot of places closing. I have concerns that people aren't able to make the money that helps them meet their needs, basic needs food, shelter, transportation.	
Unemployment, income loss	Well, I'm working from home 100%. I lost my part-time job, so my income has been reduced and I don't get to see my loved ones as much as I wish I could.	
Unemployment	I was being cut back at work. My daughter being out of school, family members being unemployed.	
Jobs available, without a living wage	To me, I feel like it's a major impact for an individual who already is living paycheck to paycheck. In regard to those that are	

	being employed, again, I don't feel like their benefits are there even hourly wages are enough for, to improve the poverty line.
Job creation, low paying	So, I'm not a super fan of the casino. I'm not a gambler I just don't see the benefit of it. I mean, a lot of people say, but it brought a lot of jobs and, I guess my counter is, yeah, it brought a lot of jobs, but at the same time, they did bring jobs where that people were making significant salaries and had great benefits and were able to still take care of their families. Like, I don't see that. I see it still, I'm like very minimum wage. You're providing jobs, but how, how is that changing or creating an impact in our communities?

## Subtheme 1.4: Concerns related to housing

Most participants shared the belief that all housing prices continue to increase, making it difficult for families to afford buying a home. Participants also shared that price increase is attributed to the presence of the casino.

Theme: Housing	Interview Quotes
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Afraid people will lose their homes because of casino presence	I feel people are going to lose their apartments, they are going to lose their [friends]
Home prices going up because of the casino presence	Everything went up, everything went up, even though rent, like I said, they don't want to fix. This is one of them things. Housing don't want to fix anything, and these houses need it.
Fear of becoming homeless	I was worried about losing my home. I was homeless, time ago I was living in a shelter for a year, 20 something years ago. And that is one of my biggest fears of having a little kid with me and becoming homeless again. And I bought this house two years ago. So, when I lost my job, at some point I wasn't able to keep paying the mortgage. So now I'll be able to catch up on my bills and stuff like that. And they instituted a forbearance program. So, it basically stops the payments for six months without affecting my credit and without people calling me to harass me about the mortgage, you know what I mean

# Theme 2. Respondents held distinct and often opposing views about the presence of the MGM casino in their community.

Some participants perceived the casino in a positive light; they acknowledged the casino's contribution to the beautification of Springfield, the entertainment opportunities, and the new job opportunities. Other respondents viewed the casino negatively. They discussed the perceived increase in crime, sex work, and low paying jobs.

Theme: Positive impact of casino	Interview Quotes
Esthetics Value	I feel like the whole area of Springfield looks better now. They did the whole outside of the buildings, they made Springfield look better. And I'd say they're making the revenue better for Springfield. They're making more money for the businesses. And I see some people talk about that they come a little bit far from like Connecticut or a little bit farther to go to the casino, but so far so good. No bad people, no bad vibes. Nothing. So it seems pretty good.
Entertainment value	But yeah, I've been there a couple times, birthday celebrations, and things for other folks, because it was something new to do locally, and have dinner. I've been there for the democratic convention, they had it at one of the restaurants. They're after party thing. Yeah. And I've been there this year too, because again, there's very little to do, and when they opened, that was the activity my family wanted to go to. And I was like, "Really? Okay." First, they went there without me, "but it's fine, it's safe". It's still a pandemic
Job creation	So do you think in a good way, it's beneficial for the community because?  Speaker 2: It helps give people jobs, because now the way everything is, people are losing their jobs. Small businesses are losing their jobs. So, the casino can help them because they need a lot of people, but I know some of them are going to be losing their job because of the

Subtheme 2.1. Some respondents associated the presence of the MGM casino with an increase in crime.

Theme: Increase in crime Interview Quotes

Increased police presence, prostitution, environment is worsening	It's never been good. Well, the only thing different is Springfield is looking a little better. That's it. But other than that, nothing. Nothing else. Because, like I told you, down the hill, you see prostitution, police officers everywhere. I don't know if they're doing the right job or not So, it's nothing really changed. Everything going worse. That's my. Everything going worse and worse and worse.
Increased crime	It was supposed to have a very big economic impact. I don't think it did have that economic impact in Springfield. It didn't I believe that crime has been hidden under the rug because in that area there, the crime still continues. If they didn't build, they have all those little police stations and everything. But it's only limited to some areas, but not all the crime [inaudible ]. I think that there's more to the social economic piece of it. The increase of the crime rate here in Springfield.
Redistribution of crime	Now in that area over there, they manicured the area, but I think that the substance abuse and all the crime that was there before continuing to the same magnitude. The only thing is they have kept it away from the casino.
Prostitution and health consequences	And I knew there was going to be an increase in sex trafficking in that trade. And if there's trafficking, that is not only the victims who were being traffic, but it's not a victimless crime, because let's say that a man is from here, Springfield goes and he sleeps with one of these women and buys a sexual into mood with that person.  Now they go back home, now they're exposing their partner to a potential, sexually transmitted infection. Are we going to see increased rates of those types of things from outside of the community? Are we going to see young women be enticed to work the life? I'm sure they can make a quick buck. I sat in a couple of company meetings and those types of meetings where we were being asked if you see these things.  The health from the drinking, the health from the gambling, the health from potential exposure to STIs and trafficking, I had those health concerns  Speaker 1: Has that increased, that last segment you-Speaker 2: Yes.
Prostitution business transition from streets to casino	So, it's not an illusion that there's less women on the street. There are less women on this [street] because they're physically in the casino and in the casino parking garage, and in the restaurants meeting people and going back to the hotel, they are, they were, I don't know if they are now with corona happening. But it was myself and a group of other [colleagues] who were sitting downand we were looking, and one of the other [colleagues]

made a comment and said, "Well, that couple looks really different. They look kind of awkward they're... It clearly is a first date." And 'I looked over at my friend and she looked at me and we looked at the [colleague] who said it, and we at the same time, we're like, "That's a hooker."

And she looked at me and the other [colleagues] that we all have to hold. I think there were six of us looked at each other and they, the light bulb went off in their head. I said that man is in a three-piece suit, that lady is not.

And when you're saying that they look kind of awkward, and that is the first date. I said, "I want you to do some math," and not that two people from different backgrounds don't get together, but I was like, "You know a casino right?" it isn't that it is not happening. It is I think now out of the view of the public, and it is much easier through Craigslist, and Facebook to advertise these, I'm going to say services, but I know that that's not the right word, in code. And if there... I mean, I've sat through multiple meetings where I'm like, "Is that what they're doing now?" And before it was this, and now it's this. So, it is 100% happening is just not happening where people get, they're not on main street anymore, they're not near the bus terminal. They're not near these are-

Theme 3. Responders noted the normative aspects of gambling, particularly as a family activity, as well as its negative consequences.

There were several quotes demonstrating how gambling activities are part of the family lore, often used as a form of leisure or recreation. Most importantly, one of the quotes shows the intergenerational aspects of gambling in the sense that gambling began with the grandmother. Interviewees would share that intergenerational gambling, that is, grandmother-grandchildren; parents-children dyads, occurs at home. Here it is especially important to note the relation between the Hispanic value of family unity with activities such as gambling.

Theme: Gambling and the Family

**Interview Quotes** 

	Yeah. And I think also culturally, we, I can say even for		
Gambling as part of	my family, we grew up with either playing the numbers.		
family lore	There was the, I don't know if you want to call it illegal,		
·	but there was always some sense ofwhen it came to		
	money, and some people see that as savings because they		
	didn't use the banks. And some people just see it as like a		
	way oftrying to get quick money.		
	In my family, they even bought a table. They did that.		
Gambling as a mean of	When they moved to the StatesAnd before, as you said,		
recreation	it was very low bets, and just for fun. And then it gotIt		
	was a regular meeting, each Friday, or each Saturday. Four		
	people, five people. They would even schedule it.		
	·		

Gambling part of the family lore. Includes extended family.	Well it's happened a lot, ever since I was a little girl, my boy cousins, my brothers, they'll all participate in, like, let's say there's a family gathering, and the cards come out, and they're playing cards, whether that's spades or something, and a couple of hours into it, they'll start playing blackjack
Gambling as an example of family activities	Right, right, right. And the thing is that it's everywhere. Like it doesn't matter if I go to like a Latin family, or a black family. If there's people who like to gamble, especially with blackjack, it's going to happen. It's really a form of entertainment, but they can get hooked on it so bad. I've seen men lose thousands of dollars in one night
Gambling as an intergenerational issue	I would say that my family has had a lot of money and they basically squandered it and I don't really know of any of them owning a home or anything like that, which is disappointing. Right? I don't think that anyone owns their home. So, they would spend thousands and thousands of dollars on horses, but yet don't have they insecure any property or bring their kids out of the gutter by paying their college education. I don't really know of anybody in the family that has done that. And it's a pretty big family. And unfortunately, my grandmother grew up but I don't know about her growing up, but all the time I've known her, she's also had a gambling problem and she pretty much passed down the gambling problem to all her fruits, to her kids.

Subtheme Theme 3.1 Respondents recognized the signs of problem gambling in self and others

Participants were able to recognize problem gambling in themselves and in others. They were also able to identify specific symptoms of problem gambling (chasing the money, betting more than what they could afford), problem gambling in the life context of the respondents was evident.

Theme: Perceptions of	
gambling	Interview Quotes

Recognizes gambling problem in self	So unfortunately, I have a serious gambling problem. I mean, I have been doing a lot better, but I had a Keno addiction. And that was probably spending six, \$700 a week on Keno for too, too long. And it did, it affected me a lot because I mean, I could have been doing a lot of other things with my money. It brought me to a place where I had been at paycheck to paycheck because I was so involved in gambling that every single dollar that I came across, I gambled.
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Recognizes gambling problem in others	I think it's kind of a little scary because that's not a It's scary because some people don't know when to stop. You know what I mean? And people use their mortgage money. Because I see people crying sometimes when I went there, and you will ask them what's wrong. And they said, I just wasted all my mortgage money. That's sad.
Recognizes urge to gamble and chasing the money	I'm always chasing the money. If I'm gambling, I'm chasing the money. And for me, it's not greed, it's just some is not enough So for instance, the other day I went, I put \$20 in the machine and I was up, I think it was three, \$400. And there three, 400, because I was like, oh, at 300 I'm going to stop. Then when I got to 300, I'm like, no because I could get a little more, I could get a little more. I'm like, no, I'm going to play to 250. And that just kept with the 50 and the 50 until I had nothing, because I was thinking a little more.

Theme 4. Impact of COVID-19 on Respondents' Lives.

As of the writing of this report, Hampden County, Springfield, had the highest COVID-19 positivity rates and COVID-19 incidence rates in the state of Massachusetts. <sup>16</sup> (Granberry, Valentino, 2020) In Springfield, the Hispanic population had the lowest vaccination rate amongst all racial and ethnic groups.<sup>17</sup>

Our data shows that the COVID-19 pandemic has had a significant and disproportionate impact on the lives of the study population. This impact is reflected in the generalized stress and anxiety that participants experience in the areas of employment (loss of income, fear of getting infected); resource access (food, income technology, care) family (isolation, death of a family member; digital divide of remote learning), environment (neighborhood crime) and self (mental health, worsening of problem gambling behavior).

COVID-19 continues to have a dual impact on family and school contexts (remote learning requirements stresses family life) or family and employment context (losing a job leads to reduced family income, which threatens access to food.) The table below shows some salient examples shared by our participants on how COVID-19 impacts life contexts.

<sup>&</sup>lt;sup>16</sup> https://www.mass.gov/doc/county-level-positivity-rates-october-6-2021/download

<sup>&</sup>lt;sup>17</sup> https://www.publichealthwm.org/COVID-19/data/Hampden#Dash

Community	Disproportionately negative health outcomes for Latinos	I think, and particularly for, besides visitation and things like that, but my concern, I think more in merge for the Latino community is that Latinos and people of color are more likely to have severe outcomes or very bad outcomes, let's say, get COVID. So, they're prone to having, being on the bed longer, having more respiratory issues and increased rates of death as we have seen. My concern would be for the people who survive and actually get better after, because we don't know what any potential long-term complications might be. If this justice is passed, if she is confirmed and they do strike down the ACA and the preexisting conditions clause that many Hispanics were already at a socioeconomic and so disadvantaged will be further harmed by not just the virus itself, but the government by taking away those protections against preexisting conditions which it's very serious possibility.
Employment	Fear of getting infected	we're shut down as of today for two weeks because a couple of employees had tested positive. Seeing that and the fear in everybody's eyes last night, it's sad. You know what I mean. For people to go through that, those emotions. It's almost a tough scene because I go in there, I actually enjoy going in there because everybody's happy. Yeah, last night was a totally different scene.
Employment	People getting laid off and losing jobs	The only thing I worried about was the jobs that we lost when it came to the casino? Honestly. Not that we couldn't go and gamble. I wasn't heartbroken that we couldn't go and gamble. I was just more worried that people got laid off and lost their jobs.
Employment/ Schooling	Stress related to employment, COVID-19 and online schooling	And even now with the school, if you are dependent on working two jobs and you have children who is at home teaching those children and making sure that they're paying attention to the lessons that are

Family	Stress supporting the family while a digital gap exists, and COVID-19 restrictions demand of online education	going on, and that they're focusing if you're busy being able just trying and keep your family afloat and surviving that's I'm very, very concerned  Our kids, our youth, the whole education system, the digital divide. Those are huge concerns for me because even though, I mean, we already have some educational gaps that exist, and I think that COVID is going to make it more of an extreme and our kids are going to be behind even more than ever. And it really impacts kids of color,
		especially the Latino community. And so how do we support those kids and even family members that can't even help them?
Family: COVID-19 infection	Relative infected with COVID-19	Well, my husband had COVID.
Family: Finance	Reduced income	I was being cut back at work. My daughter being out of school, family members being unemployed.
Family: Food	Access to food	Everybody can tell you about it, just for the food supplies, and people are scared about the COVID-19, fighting over food and fighting over things.
Family	Access to care	So, with my parents, my father has VA health insurance, and I've just been having difficulties working with them through COVID. They don't issue medications unless the doctor sees the patients, but the doctors are not seeing the patients right now because of the pandemic. So, we've just been running into a challenge with getting important medications and it's been a month already. So, that's already stressful.
Family/School	Virtual setting is challenging and reduced social engagement	It's been horrible. I'm staying home. I don't go out, and it's a big change for me and my kids. And then this whole remote learning is really stressful as well.

Family/Work	Death, unemployment	It's highs and lows, it's been a long year. I lost some family, some family survived, some friends. Personally, I am unemployed right now, but I'm okay. I am good, doing a lot of mutual aid work, and whatnot, and I'm
Government	Mistrust in government re: COVID-19	good.  I see a lot of distrust in the government from
		a lot of folks for reasons with the COVID stuff. So even when folks are getting information, there's a certain degree of distrust there. We've continued to have services, social distance, and folks with mask on at the church and everything like that. But I mean, it's just different, it's very different, and the political climate hasn't helped at all, again, with the level of distrust that folks have got with the government.
Mental health	Generalized anxiety	It looks like the world is going to end now, something like that. That's what it feels like. Worried about, hospital-wise, you don't want to go to a hospital because, for example, you think about COVID-19, that's it. And you don't want to go to a hospital, even if you sick or you got a cut or you Or, I feel like a prisoner, too, in the same time, because they want to give you fine for a mask or gloves or whatever,
Neighborhood	Crime	since the pandemic there's been a lot more random break-ins in our neighborhood. A lot more petty crime going on in our city. I have to be more vigilant about locking up my house and watching what the kids are doing. Have me more vigilant about keeping an eye on my properties.
Schooling	Stress supporting the family while a digital gap exists, and COVID-19 restrictions demand of online education	Our kids, our youth, the whole education system, the digital divide. Those are huge concerns for me because even though, I mean, we already have some educational gaps that exist, and I think that COVID is going to make it more of an extreme and our kids are going to be behind even more than ever. And it really impacts kids of color, especially the Latino community. And so how do we support those kids and even family members that can't even help them?

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Self	Social isolation	Well, it just stopped me from doing a lot of things, like going to the gym, going out, spending time with my family and friends.
Self	Reduced social engagement	Well, it's boring. You got to be in your house. You can't do much. You only go to a couple stores and everything. So yeah, affected a lot and people's lives, definitely.
Self	Fear of getting infected	And I don't come out and I don't come out because I'm afraid of COVID-19.
Self/Family/Work	Financial impact and lack of social engagement	Speaker 2: Well, it just stopped me from doing a lot of things, like going to the gym, going out, spending time with my family and friends.  Speaker 1: Yeah. Yeah. Definitely. Did it impact your job?  Speaker 2: Yeah. Cut my hours.

## Discussion

This study was implemented using a community-based participatory research approach with Hispanic residents of Springfield, MA. They reside in or around one of the most underserved and under-resourced neighborhoods in the state. These participants unreservedly shared their life circumstances, beliefs about gambling, and perceptions of the MGM casino with the research team. In doing so, they actively participated in the knowledge co-creation process and provided answers to important research questions to inform implementation science strategies to address problem gambling:

- What characterizes the life context in which study participants reside?
- Y How does the life context relate to gambling and problem gambling?
- Y How can components of the life context be incorporated into successful strategies to reduce the effects of problem gambling?

The questions followed a logical sequence, beginning with examining the overall context. The second question explored contextual features that influence gambling. The third question addresses how to inform evidence-based interventions using knowledge generated from this study.

#### What characterizes the life context in which study participants reside?

The data yielded a rich and complex description of a textured life context. Nine features and characteristics of the participants' life context were derived from the data. One of them, the Historical Feature was obtained from archival data and discussed with the CRT during the early part of this research. The table below lists them along with definitions and examples culled from the data. As the table below illustrates, one feature—the built environment—is physically tangible, and the rest are not. Also, the overwhelming majority of the identified features (except leisure, ethics and cultural components), are external factors and adverse events outside of individual's control.

Table 1. Features and characteristics of the life context of study participants		
Features and characteristics	Definition	Examples
Physical	The built environment is the man-made space in which people live, work and recreate themselves on a day-to-day basis (Roof & Oleru 2008)	Neighborhood decay     Tornado damage     Presence of the MGM casino in their neighborhood
Intersectionality	Interconnected life events and circumstances	<ul> <li>COVID-19's multiple impacts on family life</li> <li>Unemployment leading to financial challenges (e.g., inability to pay rent, food insecurity)</li> </ul>
Intergenerational	Past experiences of family members with problem gambling	Problem gambling across family generations
Historical	Past events that keep exerting their influence in current generations	<ul> <li>Bisection of the community through the creation of I-91</li> <li>Redlining</li> <li>1970's Puerto Rican Riots</li> </ul>
Cultural	Values and beliefs that individuals use to develop a sense of agency (i.e., taking responsibilities, making decisions, and establishing priorities)	<ul><li>Familism</li><li>Religiosity</li></ul>
Ethical/Moral	Personal beliefs about what is right or wrong	Views about gambling

Table 1. Features and characteristics of the life context of study participants			
Features and characteristics	Definition	Examples	
Force Majeure	Unpredictable events that have a major impact on the community	<ul><li>2011 Tornado</li><li>COVID-19 pandemic</li></ul>	
Safety	Wanting to be free from harm (Maslow, 1943).	Gun violence     Fear of crime	
Leisure	The quality of free time to engage in recreational or social activities	Limited leisure options within the community outside of the casino	
Societal	Extensive documentation of structural racism in Springfield	Respondents' first-hand experiences with racism	

Specific external and adverse events impacting participants' lives are listed in the table below. They are organized under four clusters: Family, Neighborhood, Employment, and Housing. On a typical day, participants indicated being concerned about many of these events at once: food security, fear of losing a job, ability to pay the rent, street crime, homeschooling due to COVID-19, or losing their home, among others. Note that many of those events impact the community at large rather than a few individuals as concerns about unemployment, housing affordability, fear of crime, food accessibility, lack of childcare plague underserved communities. The fact that many of the external and adverse events identified in the study are widespread in the community is particularly relevant to the answer to the next question.

#### How does the life context relate to gambling and problem gambling?

The experience of daily external and adverse life events and other circumstances conforms to the conceptualization of the stress experience. The research literature customarily defines stress as the process in which environmental demands strain the individual's capacity to adapt, thus taxing their psychological and biological resources (Cohen, Kessler & Gordon, 1995). When adverse events are ongoing and they overwhelm an individual's psychological, material and biological resources, stress becomes chronic (Mariotti, 2015). In light of the data collected, it could be hypothesized that Springfield residents experiencing chronic stress might visit a casino for distraction, to seek relief, to leave worries behind, and to escape an unpleasant reality, among other reasons.

This plausible explanation is supported by research indicating that chronic stress is linked to two types of gambling: problem gambling (Bergevin et al., 2006; Elman et al., 2010; Felsher et al.,

2010; Greco and Cucci, 2017; Kaufman et al., 2002; McCormick, et al., 2012; Santaella et al., 2013; Taber et al., 1987) and escape gambling (Richard, Blaszczynski, and Nower, 2013).

Because the entire community, defined in this case by a geographical area, is subjected to ongoing, pervasive, persistent, never-ending stressful events, we deem it reasonable to advance the use of community-level stress as a guiding explanatory concept to understand and address problem gambling among Hispanics in Springfield. In doing so, we are calling upon the idea of community-level stress— defined as a pervasive disruption caused by a sequence of stressful events and conditions (Hobfoll et al., 1995 cited by Beehler and colleagues 2021). This community-level stress concept has been successfully used in environmental sciences (Cutter et al., 2003) to address the impact of technological disasters (Couch et al., 2011) and natural disasters (Tierny et al., 2006) in community residents. Figure 1 below illustrates an explanatory model that could be used as a framework to guide the development of both interventions and policies to mitigate the presence of casinos and to reduce problem gambling in underserved communities.

# Table 2. External and adverse events impacting the life contexts of the respondents

#### **Family**

Online schooling due to COVID-19
Lack of childcare
Food insecurity
Family losses due to COVID
Crime in the neighborhood forcing families to move out of state

#### Neighborhood

Crime is a daily occurrence
Robberies, prostitution, shootings, not far from casino.
Locus St as a hotspot
Community members living in fear
Drug use continues away from the casino
Break-ins
Drug activity
Gun shootings
Prostitution

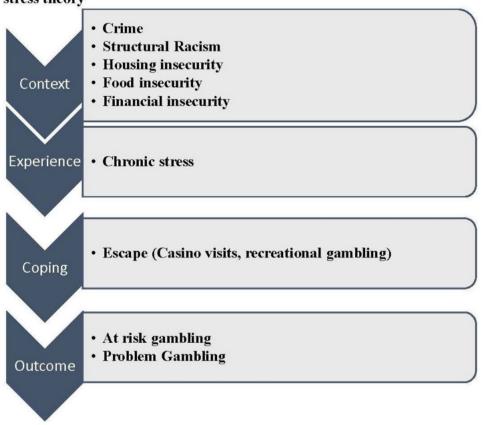
#### **Employment**

Low paying and part-time jobs Unemployment, income loss Below-living wages Fear of losing their jobs Going to work during epidemic

#### Housing

Fear of losing their homes due to casino presence Home prices going up because of the casino presence Fear of becoming homeless

Figure 1. An explanatory model of problem gambling based on the concept of communitystress theory



Applying this explanatory model to the data collected in this study, the following could be stated:

The life context of Hispanic residents in under-resourced neighborhoods in Springfield experiences a myriad of widespread external and adverse events. Prolonged exposure to those events results in chronic stress. The MGM casino, located in Springfield, uses advertisement and marketing strategies to offer hope combined with leisure and entertainment opportunities. These offerings could help release stress. A visit to the casino can be an escape to cope with stress for some residents. Exposure to gambling opportunities by visiting a casino could lead to problem gambling.

# How can components of the life context be incorporated into successful strategies to reduce the effects of problem gambling?

An in-depth understanding of the context where an intervention will be deployed is a core principle of implementation sciences. In this study, we identified a number of features of the study population's life context. With this knowledge in hand and using principles of implementation sciences as a tool, we recommend the following ways to address the role of life context when developing future evidence-based interventions to mitigate the deleterious effects of problem gambling.

#### **V** Incorporate a trauma-informed approach

Problem gambling interventions should incorporate a trauma-informed approach to acknowledge and address the many stressors experienced by its residents.

#### **V** Use multi-leveled interventions

Interventions should be transportable, flexible, and adaptable to effectively operate at different levels: individual, family, community

#### **V** Embrace culture

Interventions should integrate core elements of culture. In the case of Hispanic core values such as familism and religiosity may be key to enhance the acceptability of the interventions.

#### **V** Place matters

The features, strengths, challenges, and opportunities shaping a geographical setting need to be taken into account when developing interventions.

#### **V** Incorporate social support

Create spaces, events, and opportunities that further strengthen social support and create a sense of community.

#### **V** Address racism

Identify the pathways by which racism impacts the lives of people of color.

### Recommendations

The findings of this study can be viewed as a strong call to members of the gambling stakeholders, i.e., researchers, casino/Lotto executives program planners, community leaders and policymakers to embrace specific context-level actions that can be taken to mitigate the impact of social and health inequities on problem-gambling in underserved and under-resourced communities. The findings presented here shed light on mechanisms by which contextual features can become actionable: incorporation of trauma within psychosocial interventions, the need to address multiple contexts in community-level intervention, as well as the relevance of culture, social support, and structural racism in developing recommendations to mitigate social and health inequities that impact problem gambling.

The MGM Casino is an important and influential component of the life context of Springfield residents. Gambling stakeholders in Massachusetts have the political, financial, and social capital to push through many innovations. They can bring key leaders and decision-makers to the table to ensure; build capacity of community-based organizations to advocate for strategies to address health equity; join neighborhood redevelopment and revitalization efforts to address blight and physical deterioration of existing structures; address food insecurity, housing affordability, employment, and leisure activities. It could also leverage community benefit dollars from hospitals and health care systems to support resources, interventions, and strategies to address the challenges that Springfield residents face in the contexts of the neighborhood (transportation, crime and safety), family (childcare and food security) housing (affordability), and finances (job creation). In partnership with stakeholders in the public and private sectors, the MGM Casino is well positioned to promote place-based strategies that foster a sense of community and ensure the safety and security of host communities.

In terms of research, the identification and inclusion of contextual features invite the consideration of research theories that can explain how structural racism and social determinants of health result in health inequities. In this study, we proposed a community-level stress model to explain how contextual features are related to problem gambling and a mechanism to address them. For instance, if the experience of stress entails depletion of an individual's material, psychological and biological resources because of the strains created by adverse life events, an appropriate solution— at the community level— would be to provide needed resources or strengthen existing ones to improve the community's ability to cope with stress. In this scenario, a stress model serves as the explanatory variable, while ways for dealing with the individual stressors serve as the intervention.

## Limitations

The findings of this study have to be seen in the light of some limitations. Due to the unique circumstances in which the data was collected (in the midst of the COVID-19 epidemic) and due to the specificity of the sample (Hispanics living in proximity to the Springfield MGM Casino), the final number of participants was smaller than anticipated. Because of its small size, the sample might not be representative of the population, thus limiting generalization. In addition, the participants were mostly Puerto Rican and American citizens by birth which grants access to publicly-funded services not available to certain individuals by virtue of their immigration status. In addition, there are other limitations related to the qualitative methodology used in this study such as inability to verify the results objectively. Other than the gun violence incident data, no other quantitative data were collected to verify findings emerging from participant interviews.

# **Appendices**

This study is accompanied by two community led supplementary studies: The Casino's Impact: Community Photovoice Study. The first is a Photovoice, an idea borrowed from Mr. Victor Ortiz, Director, Massachusetts Department of Public Health Office of Problem Gambling Services.^1 Photovoice is a community participatory method for visual storytelling to promote positive social change. ^2 The second study- Gun Violence Incidents in Springfield 2010-2019 was conducted in collaboration with Mr. Christopher W. Bruce, Crime Analysis Consultant to the Massachusetts Gaming Commission Assistant Professor of Criminal Justice, Husson University. Both studies supplement the conducted interviews to provide a holistic view of the life context of residents in Springfield, as well as the consequences of the MGM Casino.

https://www.basisonline.org/2020/03/gambling-expansion-public-health-equity-massachusetts.html

# References

- Adinoff, B., Leonard, D., Price, J., Javors, M. A., Walker, R., Brown, E. S., Xiao, H., & Rao, U. (2017). Adrenocortical sensitivity, moderated by ongoing stress, predicts drinking intensity in alcohol-dependent men. *Psychoneuroendocrinology*, 76, 67–76. https://doi.org/10.1016/j.psyneuen.2016.10.011
- Alegria, A. A., Petry, N. M., Hasin, D. S., Liu, S.-M., Grant, B. F., & Blanco, C. (2009). Disordered gambling among racial and ethnic groups in the US: results from the national epidemiologic survey on alcohol and related conditions. *CNS Spectrums*, *14*(3), 132–142. https://doi.org/10.1017/s1092852900020113
- Beehler, S., Corcoran, F., McConkey, M., Jasken, J., & McIntyre, A. (2021). Rural community stress: Understanding risk and building resilience.
- Bergevin, T., Gupta, R., Derevensky, J., & Kaufman, F. (2006). Adolescent Gambling: Understanding the Role of Stress and Coping. *Journal of Gambling Studies*, 22(2), 195–208. https://doi.org/10.1007/s10899-006-9010-z
- Bird, C. E., Seeman, T., Escarce, J. J., Basurto-Davila, R., Finch, B. K., Dubowitz, T., Heron, M., Hale, L., Merkin, S. S., Weden, M., & Lurie, N. (2009). Neighbourhood socioeconomic status and biological "wear and tear" in a nationally representative sample of US adults. *Journal of Epidemiology & Community Health*, 64(10), 860–865. https://doi.org/10.1136/jech.2008.084814
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <a href="https://doi.org/10.1191/1478088706qp0630a">https://doi.org/10.1191/1478088706qp0630a</a>
- Bronfenbrenner, U. (1979). The Ecology of Human Development: Experiments by Nature and Design. In *Google Books*. Harvard University Press. https://books.google.com/books?hl=en&lr=&id=OCmbzWka6xUC&oi=fnd&pg=PA3&dq=%E2%80%A2%09Bronfenbrenner
- Cohen, S., Kessler, R. C., & Gordon, L. U. (1997). Measuring Stress: A Guide for Health and Social Scientists. In *Google Books*. Oxford University Press.

  <a href="https://books.google.com/books?hl=en&lr=&id=2S3RCwAAQBAJ&oi=fnd&pg=PA3&dq=Cohen+S">https://books.google.com/books?hl=en&lr=&id=2S3RCwAAQBAJ&oi=fnd&pg=PA3&dq=Cohen+S</a>
- Corburn, J., Boggan, D., Muttaqi, K., Vaughn, S., Houston, J., Thibodeaux, J., & Muhammad, B. (2021). A healing-centered approach to preventing urban gun violence: The Advance Peace Model. *Humanities and Social Sciences Communications*, 8(1), 1–7. https://doi.org/10.1057/s41599-021-00820-y
- Couch, S. R., & Coles, C. J. (2011). Community stress, psychosocial hazards, and EPA decision-making in communities impacted by chronic technological disasters. American journal of public health, 101 Suppl 1(Suppl 1), S140–S148., and in natural disasters
- Craig, P., Di Ruggiero, E., Frohlich, K. L., Mykhalovskiy, E., White, M., Campbell, R., Cummins, S., Edwards, N., Hunt, K., Kee, F., Loppie, C., Moore, L., Ogilvie, D.,

- Petticrew, M., Poland, B., Ridde, V., Shoveller, J., Viehbeck, S., & Wight, D. (2018). *Taking account of context in population health intervention research: guidance for producers, users and funders of research.* https://doi.org/10.3310/cihr-nihr-01
- Cutter, Susan L., Brya J. Boruff, and W. Lynn Shirley, "Social Vulnerability to Environmental Hazards."
- Daly, M., Boyce, C., & Wood, A. (2015). A social rank explanation of how money influences health. *Health Psychology*, *34*(3), 222–230. https://doi.org/10.1037/hea0000098
- Daniels, K. (2018). Understanding Context in Reviews and Synthesis of health policy and systems research. In *www.ncbi.nlm.nih.gov*. World Health Organization. https://www.ncbi.nlm.nih.gov/books/NBK569586/
- Edwards, N., & Barker, P. M. (2014). The Importance of Context in Implementation Research. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 67, S157–S162. https://doi.org/10.1097/qai.00000000000000022
- Elman, I., Tschibelu, E., & Borsook, D. (2010). Psychosocial Stress and Its Relationship to Gambling Urges in Individuals with Pathological Gambling. *American Journal on Addictions*, no-no. <a href="https://doi.org/10.1111/j.1521-0391.2010.00055.x">https://doi.org/10.1111/j.1521-0391.2010.00055.x</a>
- Evans, G. W. (2016). Childhood poverty and adult psychological well-being. *Proceedings of the National Academy of Sciences*, 113(52), 14949–14952. https://doi.org/10.1073/pnas.1604756114
- Felsher, J. R., Derevensky, J. L., & Gupta, R. (2009). Young Adults with Gambling Problems: The Impact of Childhood Maltreatment. *International Journal of Mental Health and Addiction*, 8(4), 545–556. <a href="https://doi.org/10.1007/s11469-009-9230-4">https://doi.org/10.1007/s11469-009-9230-4</a>
- Granberry, P., & Valentino, K. (2020). Latinos in Massachusetts: Puerto Ricans. *Gastón Institute Publications*. https://scholarworks.umb.edu/gaston\_pubs/249/\_
- Greco, R., & Curci, A. (2016). Does the General Strain Theory Explain Gambling and Substance Use? *Journal of Gambling Studies*, *33*(3), 919–936. <a href="https://doi.org/10.1007/s10899-016-9654-2">https://doi.org/10.1007/s10899-016-9654-2</a>
- Guidi, J., Lucente, M., Sonino, N., & Fava, Giovanni A. (2020). Allostatic Load and Its Impact on Health: A Systematic Review. *Psychotherapy and Psychosomatics*, *90*, 1–17. https://doi.org/10.1159/000510696
- Hahmann, T., Hamilton-Wright, S., Ziegler, C., & Matheson, F. I. (2020). Problem gambling within the context of poverty: a scoping review. *International Gambling Studies*, 1–41. https://doi.org/10.1080/14459795.2020.1819365
- Hobfoll S.E., Briggs S., Wells J. (1995) Community Stress and Resources: Actions and Reactions. In: Hobfoll S.E., de Vries M.W. (eds) Extreme Stress and Communities: Impact and Intervention. NATO ASI Series (Series D: Behavioural and Social Sciences), vol 80. Springer, Dordrecht.
- Hounkpatin, H. O., Wood, A. M., & Dunn, G. (2016). Does income relate to health due to psychosocial or material factors? Consistent support for the psychosocial hypothesis

- requires operationalization with income rank not the Yitzhaki Index. *Social Science & Medicine*, *150*, 76–84. https://doi.org/10.1016/j.socscimed.2015.12.008
- Jiménez, M. P., Osypuk, T. L., Arevalo, S., Tucker, K. L., & Falcon, L. M. (2015).

  Neighborhood socioeconomic context and change in allostatic load among older Puerto Ricans: The Boston Puerto Rican health study. *Health & Place*, *33*, 1–8. https://doi.org/10.1016/j.healthplace.2015.02.001
- Mariotti, A. (2015). The effects of chronic stress on health: new insights into the molecular mechanisms of brain–body communication. *Future Science OA*, 1(3). https://doi.org/10.4155/fso.15.21
- Morris, Z. S., Wooding, S., & Grant, J. (2011). The answer is 17 years, what is the question: understanding time lags in translational research. *Journal of the Royal Society of Medicine*, 104(12), 510–520. https://doi.org/10.1258/jrsm.2011.110180\_
- Nilsen, P., & Bernhardsson, S. (2019). Context matters in implementation science: a scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. *BMC Health Services Research*, *19*(1). https://doi.org/10.1186/s12913-019-4015-3
- O'Campo, P., Schetter, C. D., Guardino, C. M., Vance, M. R., Hobel, C. J., Ramey, S. L., & Shalowitz, M. U. (2016). Explaining racial and ethnic inequalities in postpartum allostatic load: Results from a multisite study of low to middle income woment. *SSM Population Health*, *2*, 850–858. https://doi.org/10.1016/j.ssmph.2016.10.014
- Ortiz, V. (2017). Gambling: A Public Health Perspective [Review of *Gambling: A Public Health Perspective*]. In C. Reilly (Ed.), *Gambling and Public Health, A Guide for Policy Makers*. http://icrg.org/sites/default/files/uploads/gambling\_and\_public\_health\_-\_a\_guide\_for\_policymakers\_web.pdf#page=11
- Ortiz, V., Cain, R., Formica, S. W., Bishop, R., Hernández, H., & Lama, L. (2021). Our Voices Matter: Using Lived Experience to Promote Equity in Problem Gambling Prevention. *Current Addiction Reports*, 8(2), 255–262. https://doi.org/10.1007/s40429-021-00369-5
- Ortiz, V., Hernández, H., (2019). Responsible Gambling: Primary Stakeholder Perspectives.

  In *Google Books*. Oxford University Press.

  <a href="https://books.google.com/books?hl=en&lr=&id=aParDwAAQBAJ&oi=fnd&pg=PA111">https://books.google.com/books?hl=en&lr=&id=aParDwAAQBAJ&oi=fnd&pg=PA111</a>
  &dq=%E2%80%A2%09Ortiz
- Prior, L., Manley, D., & Jones, K. (2018). Stressed out? An investigation of whether allostatic load mediates associations between neighbourhood deprivation and health. *Health & Place*, 52, 25–33. <a href="https://doi.org/10.1016/j.healthplace.2018.05.003">https://doi.org/10.1016/j.healthplace.2018.05.003</a>
- Ribeiro, A. I., Fraga, S., Kelly-Irving, M., Delpierre, C., Stringhini, S., Kivimaki, M., Joost, S., Guessous, I., Gandini, M., Vineis, P., & Barros, H. (2019). Neighbourhood socioeconomic deprivation and allostatic load: a multi-cohort study. *Scientific Reports*, *9*(1), 8790. https://doi.org/10.1038/s41598-019-45432-4

- Richard, D. C., Blaszczynski, A., & Nower, L. (Eds.). (2013). *The Wiley-Blackwell handbook of disordered gambling*. John Wiley & Sons.
- Richard, D. C., Blaszczynski, A., & Nower, L. (Eds.). (2013). *The Wiley-Blackwell handbook of disordered gambling*. John Wiley & Sons.
- Robinette, J. W., Charles, S. T., Almeida, D. M., & Gruenewald, T. L. (2016). Neighborhood features and physiological risk: An examination of allostatic load. *Health & Place*, *41*, 110–118. https://doi.org/10.1016/j.healthplace.2016.08.003
- Rog, D. J., Fitzpatrick, J. L., & Conner, R. F. (2012). Context: A Framework for Its Influence on Evaluation Practice: New Directions for Evaluation, Number 135. In *Google Books*. John Wiley & Sons. https://books.google.com/books?hl=en&lr=&id=oY6jLaYw6lgC&oi=fnd&pg=PT11&dq=Rog
- Schulz, A. J., Mentz, G., Lachance, L., Johnson, J., Gaines, C., & Israel, B. A. (2012). Associations Between Socioeconomic Status and Allostatic Load: Effects of Neighborhood Poverty and Tests of Mediating Pathways. *American Journal of Public Health*, 102(9), 1706–1714. https://doi.org/10.2105/ajph.2011.300412
- Schwartz, J. A. (2017). Long-term physical health consequences of perceived inequality: Results from a twin comparison design. *Social Science & Medicine*, *187*, 184–192. https://doi.org/10.1016/j.socscimed.2017.06.006
- Seeman, T. E., Gruenewald, T. L., Cohen, S., Williams, D. R., & Matthews, K. A. (2014). Social relationships and their biological correlates: Coronary Artery Risk Development in Young Adults (CARDIA) study. *Psychoneuroendocrinology*, *43*, 126–138. https://doi.org/10.1016/j.psyneuen.2014.02.008
- Seeman, T., Merkin, S. S., Crimmins, E., Koretz, B., Charette, S., & Karlamangla, A. (2008). Education, income and ethnic differences in cumulative biological risk profiles in a national sample of US adults: NHANES III (1988–1994). *Social Science & Medicine*, 66(1), 72–87. https://doi.org/10.1016/j.socscimed.2007.08.027 Social Science Quarterly, Vol. 84, No. 2, June 2003, pp. 242–261.
- Squires, J. E., Aloisio, L. D., Grimshaw, J. M., Bashir, K., Dorrance, K., Coughlin, M., Hutchinson, A. M., Francis, J., Michie, S., Sales, A., Brehaut, J., Curran, J., Ivers, N., Lavis, J., Noseworthy, T., Vine, J., Hillmer, M., & Graham, I. D. (2019). Attributes of context relevant to healthcare professionals' use of research evidence in clinical practice: a multi-study analysis. *Implementation Science*, *14*(1). <a href="https://doi.org/10.1186/s13012-019-0900-8">https://doi.org/10.1186/s13012-019-0900-8</a>
- Tierney, Kathleen, Christine Bevc, and Erica Kuligowski, "Metaphors Matter: Disaster Myths, Media Frames, and Their Consequences in Hurricane Katrina," The Annals of the American Academy of Political and Social Science, Vol. 604, No. 1, 2006, pp. 57–81.
- Tremblay, M.-C., Martin, D. H., McComber, A. M., McGregor, A., & Macaulay, A. C. (2018). Understanding community-based participatory research through a social movement

- framework: a case study of the Kahnawake Schools Diabetes Prevention Project. *BMC Public Health*, 18(1). https://doi.org/10.1186/s12889-018-5412-y
- Volberg, R.A. & Williams, R.J. (2012). Developing a Short Form of the PGSI. Report to the Gambling Commission.
- Wallace, M., Harville, E., Theall, K., Webber, L., Chen, W., & Berenson, G. (2013). Neighborhood poverty, allostatic load, and birth outcomes in African American and white women: Findings from the Bogalusa Heart Study. *Health & Place*, *24*, 260–266. https://doi.org/10.1016/j.healthplace.2013.10.002
- Welte, J. W., Barnes, G. M., Tidwell, M.-C. O., Hoffman, J. H., & Wieczorek, W. F. (2014). Gambling and Problem Gambling in the United States: Changes Between 1999 and 2013. *Journal of Gambling Studies*, *31*(3), 695–715. https://doi.org/10.1007/s10899-014-9471-4

# Appendix 1.

The Casino's Impact: A Community Photovoice Study
Fall 2020

## The Casino's Impact: A Community Photovoice Study

## Introduction to Project

Throughout this project, we engaged the community in discussing the MGM Casino's impact in Springfield neighborhoods. We have engaged in two main forms of research: community interviews and environmental scans. Regarding the latter, we hired a member of our research team – Jacqueline Velez- who is a photographer and advocate, to take photos of the areas surrounding the casino using a methodology inspired by Photovoice. This process of storytelling brings visual life to the issues discussed in the interviews. It mirrors the general themes of the casino's proximity and, arguably, contribution to poverty, as well as the community's dedication to continued justice. There is also the foundation of neighborhood stress, which can be measured in line with access to the social determinants of health- economic stability, education access, and quality, healthcare access and quality, social community context, and finally, neighborhood and built environment. This report focuses on the last element. Ms. Velez took over 500 photographs, and selected the below 7 for illustrative purposes. The remaining photographs will be used for future studies including one that is underway presently with the Neighbor to Neighbor Team. The below photographs were selected to highlight the five main findings of this Photovoice Project: (1) the proximity of law and addiction, (2) the parallel of Covid's devastation and the luxury and continued profit of the casino (3) community activism in the wake of racial and economic injustice (4) the detrimental financial impact the casino had on local businesses, and the displacement of residents of color (5) the resiliency of the community.

## Casino Proximity to Courthouse

This photo shows the relative proximity of the MGM casino to the Roderick L. Ireland Courthouse in Springfield. In conversation with community members, folks have shared that this image represents not only the physical proximity of issues of addiction and poverty, but also the existential reality that there is a fine line between escapism and hope, and gambling addiction. The issue of the casino attracting crime and taking safety resources away from other areas in the city has been raised in our conversations and can be reflected here. A community member notes this image is "telling of how things are structured for our demise."



#### **COVID Treatment**

Ms. Velez took this photo at the height of the pandemic. The City had set up tents to treat individuals who were COVID positive. She notes that these tents were just a few blocks away from the MGM Casino and right across Friends of the Homeless. A community member shares, "while people are enjoying themselves at the slot machines and poker tables, people are suffering [a few blocks away] from homelessness and this pandemic.". This image reflects the parallel and duality of two quite different worlds





This image was taken shortly after the murder of George Floyd. Here, community members are joining in on the wave of protests for racial equity. Velez notes, times like these are when folks "see why people stand up and stand out for others... we are disenfranchised, marginalized, and oppressed." This image mirrors the community activism that exists daily

in Springfield. Numerous residents led groups provide resources, information, and space to advocate for change.

## **Empty Buildings**

Upon walking around downtown Springfield, one notes the numerous empty buildings that surround the casino area. Community members remember the mom and pop shops that have gone out of business or were pushed out by the casino. Velez says: it is "hard to believe there's a multi-million dollar facility in the middle of all of this." The proximity of homelessness, poverty, and crime to the casino has been frequently noted and many are frustrated that that, with "so much money flowing through the casino",

buildings such as these haven't been

rehabilitated and made accessible to the residents who need it.



There are few businesses that have survived MGM's downtown development. Increases in property prices are one of the many reasons why businesses have been pushed out. This picture shows a small franchise that made it through. Adjacent to empty lots and spaces for lease, this photo evokes the very real sadness that community residents have shared, as well as the minimal hope that remains.

#### Discussion

While these photos give just a flavor of the catalogue Ms. Velez put together, the parallel of luxury and poverty is one that transcends across most interviews and photographs. While many of these photos evoke sadness, further investigation shows that they ultimately represent the physical consequence of broken promises. Many community members have expressed that, at the onset, the casino committed to bolstering the economy of Springfield through the building of this development, the hiring of residents, and the annual \$7 million allocation to the City. The broad sentiment of community members, however, is that the casino has fallen short of these promises- residents have not been employed on a large scale, businesses were forced to close down, the community is not feeling an economic boost, and resources have been pulled away from neighborhoods and towards the casino. Further, folks argue that the casino has actually made their life contexts quite worse- prices have increased making housing, food, and resources unaffordable, external developers are buying property that residents have had in their families for generations, there is a lack of community investment with the funds from the casino, and there a feeling that people's hope- their desire for a better life- is being taken advantage of for profit.

In sum, we are-through the avenues of interviews and a community scan-studying the allostatic load of community residents in Springfield. Allostatic load, defined as "the cumulative burden of chronic stress and life events" (Guidi et al., 2020), is influenced by a

number of factors including income levels (Daly et al., 2015; Evans, 2016; Hounkpatin, 2016; Seeman et al., 2008; Upchurch et al., 2015), impoverished neighborhood residence (Bird et al., 2009; Jiménez et al., 2015; Prior et al., 2018; Schulz et al., 2012; Ribeiro et al., 2019; Robinette et al., 2016; Wallace et al., 2013), and racial (O'Campo, 2016) and social inequalities (Seeman, 2014; Schwartz, 2017). It is important to recognize that this allostatic load is being described by the individuals in this study who are primarily Latinx and individuals of color.

Most of the individuals interviewed were experiencing socio-economic injustice before the casino was built, and note that the consequences of the casino, along with the COVID-19 pandemic, have overwhelmingly exacerbated and added to these issues. The consequences of allostatic load include mental health challenges as well as alcohol dependence (Adinoff et al., 2017), which, as one participant noted, are interwoven in the fabric of stigma, making these struggles difficult to address. It is evident through our conversations with community members and the results of our neighborhood scan, that the residents of Springfield are experiencing significant chronic stress, which has been further emphasized through the economic, emotional, and physical consequences of the MGM Casino.

# Appendix 2.

Gun Violence Incidence in the Springfield Area 2010-2019

Fall, 2020

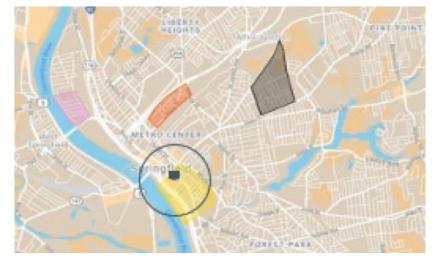
#### **Question at Hand**

This study analyzes the gun violence data collected over the past ten years to see where and what the effects could have been from gun-related incidences, focusing on Hispanic communities. It is known that gun-related incidences are a form of and contribute significantly to community-based toxic stress (Corburn et al., 2021). In a 2016 report by the Urban Institute, in collaboration with the Joyce Foundation and the Joint Center for Political and Economic Studies, they found that the rate of Hispanic boys and men being victims of gun homicides was four times greater than their white counterparts (Bieler et al., April 2016). This study aims to analyze those rates in the Springfield, MA area.

## **Study Area**

The city of Springfield is split into multiple neighborhoods, of which each have different denominations of Hispanic populations. Those with the highest Hispanic populations are the North End (purple), McKnight Area (black), South End (yellow), and Liberty Street (orange) areas. Those were the areas we decided to focus on. The gun violence data collected had distinctions between the types of incidences, but all very distinctively had reports of firearm involvement. (see Table 1), however, we decided not to distinguish between them because a gun incidence has an impact regardless of circumstance.

Figure 1: Highlighting the areas of focus in this study. Note 800m radius circle around MGM Casino. See Appendix 2.1 for larger version.



### **Methods and Data Collection**

The data collected for this analysis is a combination of data from different locations. The demographic data, as well as regional distributions of people are collected from the Census Bureau's 2010 census. The Gun Violence incidents are a data set collected and provided by the Springfield Police Department in collaboration with the Massachusetts Gambling Commission. The gun incidents included were police reports that fell into the categories listed to the left. No distinctions were made between incidence types as all involved gun violence. The analysis was done through GIS mapping software on ArcGIS, Google MyMaps, and Tableau, where trends and visual connections were verified. (Investigation 2011)

Incidence Based Reporting	Offense Description	Definition
13A	Aggravated Assault	The FBI's Uniform Crime Reporting (UCR) Program defines aggravated assault as an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury.
120	Robbery	armed robbery as the event in which an another person and individual assaults either robs, steals or takes money or other property while armed with a dangerous weapon.
09A	Murder & Nonnegligent Manslaughter	The willful killing of one human being by another. Any death caused by injuries received in a fight, argument, quarrel, assault or the commission of a crime.

Table 1: As stated in the Uniform Crime Reporting Program National Incident-Based

#### **Discussion**

The above findings tell what kind of toxic stress those communities are experiencing. To further analyze the maps, we decided to focus on a small region just north of the Casino to see just what the impact was. In Figure 3, an outline of the Brightwood region can be seen, a subsection of the North End. In the past ten years, there have been 50 gun-related incidents, which is the highest of any region of this size. Moving further from this region, the number of incidents slowly declined (see Map in Appendix 2.2). For more perspective, from 2016-to 2019, there were 20+ incidents. That is the equivalent of one student going through their entire high school career, a quite formative time, and having 5+ incidences per school year. This high number of incidences can cause toxic stress and damage community health at every level.



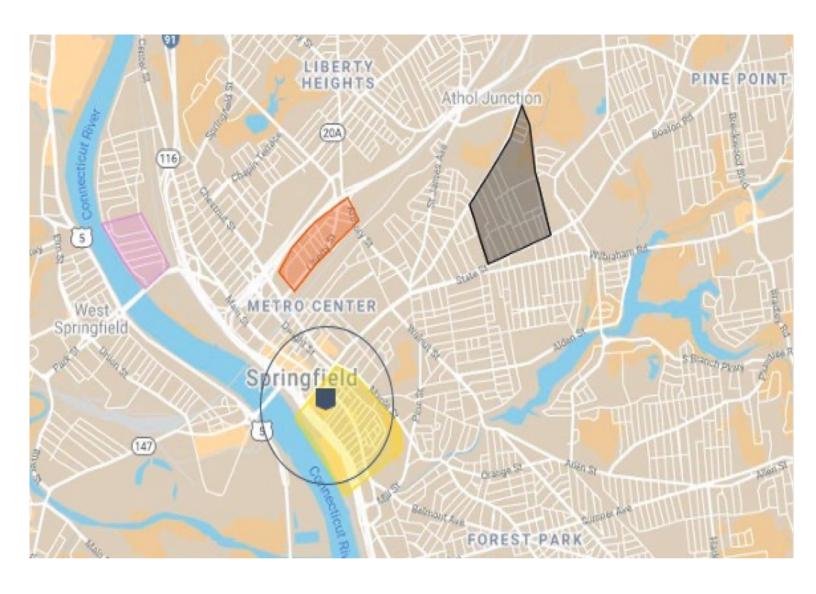
Figure 3: Brightwood Area in the last 10 years about Gun Violence Incidences.

#### **Future Work to be Done**

This research is not comprehensive. There is still more research that could be done on the individual impacts of the gun violence in Springfield, although that has been researched much in greater contexts outside of the Springfield region. More long-term trauma research could be done on those members of the community who have experienced the incidences as they occurred to understand the direct effect. Now with the more recent Census data coming out, there would also be an opportunity to analyze any changes in location of the gun violence with recent population trends, as well as trends that correspond with the development of the MGM Casino.

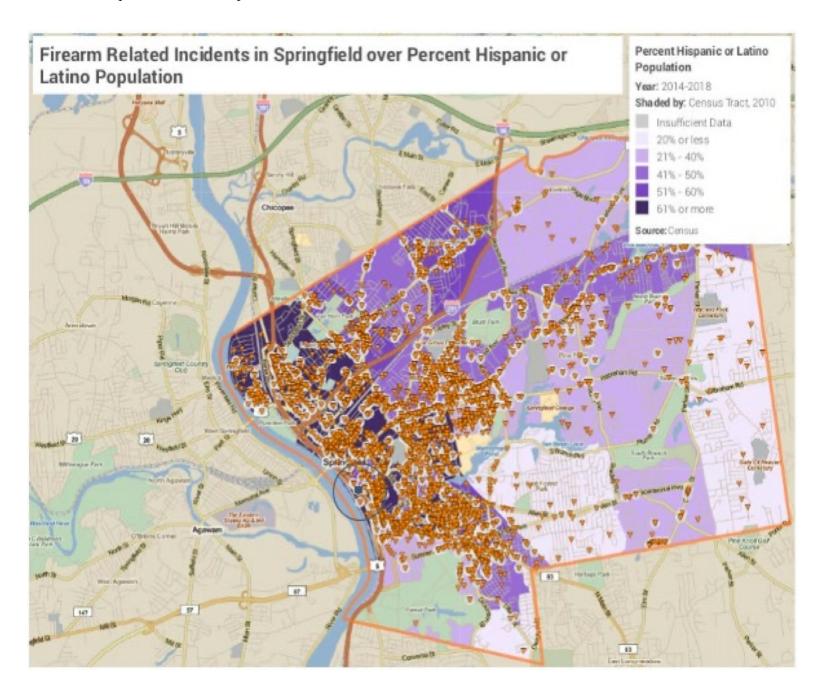
# Appendix 2.1

Enlarged image of the regions of Springfield focused on in the study. Note 800m radius circle around MGM Casino. North End (purple), McKnight Area (black), South End (yellow), and Liberty Street (orange).



# Appendix 2.2

Enlarged image of the firearm related incidents in Springfield over Percentage Hispanic of Latino Populations. Note 800m radius circle around MGM Casino.



### References

Bieler, Sam, Kilolo Kijakazi, Nancy La Vigne, Nina Vinik, and Spencer Overton. April 2016.

Engaging Communities in Reducing Gun Violence: A Road Map for Safer Communities.

Urban Institute.

Bureau, U.S. Census. 2018. National Census. Springfield: U.S. Census Bureau. Corburn, Jason, DeVone Boggan, Khaalid Muttaqi, Sam Vaughn, James Houston, Julius Thibodeaux, and Brian Muhammad. 2021. "A healing-centered approach to preventing urban gun violence: The Advance Peace Method." Humanities and Social Sciences Communication.

Investigation, U.S. Department of Justice - Federal Bureau of. 2011. NIBRS Offense Codes. NIBRS Report, U.S. Department of Justice.

# Appendix 3.

# Interview Guide:

Life Context of Springfield Latino Community: Relevance to Gambling

Fall, 2020

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I work/volunteer for N2N here in Springfield. We are conducting a study funded by the MA Gaming Commission. The purpose of the study is to describe the impact of problem gambling on the Latinx community in Springfield. These questions will take between 10 and 15 minutes. In appreciation for your time, we will give you \$20 for the interview, is this okay with you?

Please know that I will do everything I can to protect your privacy. I am asking for your permission to record our conversation to avoid taking notes while we talk. Can I record the conversation? (wait for a response). Once we get the recording transcribed, we will delete the recordings. Your name or any personal information will not be published in the report. Saying no to the recording will not prevent you from doing this interview. Can we start the interview?" (START RECORDING)

#### First let me ask, how are you doing?

## How has COVID impacted your life? (I hope you and your loved ones are safe.)

### Besides COVID, what other issues are you worried about?

I will be asking you about the things/concerns that are going on in your life. For instance: Some people are concerned about crime in the community, food security, employment, online classes for the children, housing, financial security, etc...

- What concerns you right now?
- How does the [identified concern] affect(s) you?

## If it's okay with you, I'd like to transition to the topic of gambling.

- Do you know of a person (friend or relative) that has been impacted by gambling?
- How were they affected?
- If that person were to reach out to you, would you know what to do or where to send them for help?

## Do you know of a person (friend or relative) that has been impacted by gambling?

- How have they been affected?
- What have they been doing since the casino closed?
- If that person were to reach out to you for help with his/her gambling issues, would you know what to do or where to send them for help?

### The casino industry and some public health officials encourage people to gamble responsibly.

- What does the term "responsible" mean to you?
- What do you think about it?

#### The casino opened about 2 years ago....August 2018.

- Have you been to the casino?
- Tell me about your visits to the casino. What do you usually do there (dining, attending concerts, gambling, hanging out)?
- How do you feel about having a casino in Springfield as it relates to people in general?
- What about jobs, housing, and the economy?
- In what ways has the casino been good for Springfield?