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Emerging Patterns of Crack Use in Mexico City

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Compared to previous decades there has been a steady decline and stabilization of crack cocaine use in American and Western European countries. Concomitantly, global epidemiological studies have reported an increased prevalence of crack among poor urban populations in Mexico, Latin American, and Caribbean countries such as Brazil, Guatemala and Colombia (Bastos, Mendes, Arruda Vieira Duarte, Carmo, & Bertoni, 2011; Burcardo et al., 2005; United Nations, 2010). In Mexico, the largest increases are occurring in Mexico City neighborhoods characterized by high population density, poverty, unemployment, inadequate housing, highly concentrated informal street commerce and different levels of criminal activities from individual-based to highly organized illegal enterprises (Bastos et al., 2011; Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, 2012; Instituto para la Atención y Prevención de las Adicciones en la Ciudad de México, 2014). The increased prevalence of crack in a population is significant in that use of this drug has been linked in studies in the U.S. and Western Europe to chronic use, addiction, crime and sexual risk behaviours that are associated with HIV and other infectious diseases (Hoffman, Klein, Eber, & Crosby, 2000; Inciardi & Pottieger, 1994; Smart, 1991). This paper describes the profiles and patterns of crack use among residents in Mexico City (*México, Distrito Federal (DF)*) a metropolitan area of over 21 million people. Specifically, the research provides new knowledge on crack use behaviors within the social and cultural context of these highly marginalized Mexico City populations and allows us to compare these to crack use in the U.S. and Europe. This is particularly important because the responses to crack and other drugs in countries like Mexico may require more tailored health and social responses than have been used in more developed countries.

Mexico has had a relatively low illegal drug use prevalence rate compared to the U.S., even though these two nations are socially, economically and culturally interdependent. However, drug use has been steadily increasing in Mexico during the last few decades especially along the U.S/Mexico border and other large urban areas. These increases have largely been in the

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use of marijuana, powdered cocaine, methamphetamines and prescription drugs. During the last decade, Mexico experienced a dramatic increase in the use of crack cocaine with Mexico City having the highest increases in the nation (Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, 2012). This same data reveals that this city had a higher drug prevalence rate (7.8%) than Mexico's national average (5.7%). Moreover, other data on crack treatment indicate that Mexico City's the percentage of total treatment admissions increased from 8% in 2003 to approximately 40% in 2007 (Instituto Nacional de Salud Publica, 2009). Other cities in Mexico such as Monterey, Guadalajara, and Toluca and selective rural areas receiving returning immigrants from the United States (U.S.) had increases in crack use, but none as high as Mexico City.

These Mexican immigration patterns coincided with the decline of crack use in the U.S. in the 1990s and into the 2000s (Hamid, 1992; Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2014) and its rise in other developed and underdeveloped countries (Barrio, De la Fuente, Royuela, Díaz, & Rodríguez-Artalejo, 1998; Blanken, Barendregt, & Zuidmulder, 1999; Grund, Adriaans, & Kaplan, 1991; Hunter, Donoghoe, & Stimson, 1995; Jeri, 1984). Crack's emergence in Latin America follows the use of coca paste (basuco) and later powdered cocaine in the 1980s and the 1990s primarily among disenfranchised populations in this region (Noto, Galduróz, Nappo, & Carlini, 2004). However, reports of crack use only began to appear in these countries, including Mexico, during the last decade (Andrade, Lurie, Medina, Anderson, & Dourado, 2001; de Oliveira & Nappo, 2008; Inciardi et al., 2006; Rodríguez, Marques, & Touzé, 2002).

Previous studies on crack use patterns have described a trajectory defined by sequential phases similar to the use of heroin and powdered cocaine that (Grund et al., 1991; Maddux & Desmond, 1981; Waldorf, Reinerman, & Murphy, 1991; Winick, 1962) include the phases of initiation, maintenance, cessation, and relapse (Waldorf et al., 1991). Crack cocaine, however, has been viewed as having a higher abuse liability and dependency compared to the use of intranasal powdered cocaine (Chen & Anthony, 2004; Hatsukami & Fischman, 1996). Other crucial factors that distinguish crack include immediacy, duration, magnitude of effect, amount, and frequency of use (Hatsukami & Fischman, 1996). The duration of crack's effect is much shorter than intranasal cocaine. These findings have been used to modify the theory of sequential phases of crack patterns to distinguish two stages of progression: (1) from intranasal powder cocaine to crack use and (2) from experimentation with crack to dependence (Hatsukami & Fischman, 1996). The majority of crack studies in the U.S. and Western Europe have described a linear progression that results in frequent and prolonged crack use (Jackson-Jacobs, 2004; Ratner, 1993; Rosse et al., 1993; Wallace, 1989). Given these theoretical modifications, we posed the research question of whether the crack use patterns observed in the context of Mexico City would be similar or different when compared to those that emerged in the U.S. and Western Europe as documented by the literature and our prior research on Latino immigrant workers in the U.S. (Valdez, Cepeda, Negi, & Kaplan, 2010).

Methods

This project was funded by the National Institute on Drug Abuse through an international funding mechanism that included an American university and a Mexican federal research institute. The research team identified, recruited, and interviewed current crack users in three Mexico City *delegaciones*: Cuauhtémoc, Coyoacan, and Iztapalapa. Mexico City is subdivided into 16 *delegaciones* for administrative purposes that are the equivalent to boroughs. The *delegaciones* were selected based on epidemiological and crime data that identified these as having the highest rates of crime and drug use in the city (Procuraduría General de Justicia del Distrito Federal, 2009). These *delegaciones* are characterized by mixed housing units, large and small retailers, street vendors, large shopping plazas, auto repairs shops, restaurants, bars and hotels. Communities are organized into strong associations of merchants, community-based organizations, and political parties (Zamudio Angles, 2012). In addition, different levels of criminal activities exist in these areas, from individual-based to highly organized illegal enterprises.

Data collection consisted of ethnographic observations in the community and in-depth semi-structured ethnographic interviews with a total of 156 current crack users and ethnographic observations. The sample of crack users was equally recruited from the three *delegaciones*. All interviews were transcribed and analyzed in Spanish (Lopez, Figueroa, Connor, & Maliski, 2008). In regards to their drug use history, the sample was overwhelmingly represented by polydrug users of illicit drugs including marijuana, prescription pills, inhalants and methamphetamines.

An adaptive sampling methodology was used in the study and combined elements of field-intensive outreach; rapid assessment, response, and evaluation; and targeted respondent-driven sampling (Valdez, Cepeda, Neaigus, & Russell, 2008). Targeted areas in the three *delegaciones* were assessed to identify where crack was being used or purchased, descriptions of the crack-using population, and related features including time and day of the week when crack use was observed (Needle et al., 2003). Once the characteristics of the target population were identified, a targeted respondent-driven sampling methodology with elements of chain referral and snowball sampling techniques was employed to recruit study participants (Griffiths, Gossop, Powis, & Strang, 1993; Heckathorn, 1997).

The inclusion criteria for enrollment in the study were: 18 years of age or older; self-reported crack use at least once during the previous 30 days; and no participation in formal drug treatment 30 days prior to enrollment. An NVivo database consisting of transcripts from the ethnographic interviews and daily observational field notes was used for analysis. The ethnographic interviews provided narrative accounts of the subjects' experiences with crack, other drugs, and sexual and related health risk behaviors. The field notes complemented the interview data by providing descriptions of the social and cultural context of the targeted area.

Seventy-three percent of the participants were male. The mean age was 32.6 years (standard deviation: 9.3). Over half (51%) were single, followed by 33 percent who were married and 16 percent separated/ divorced or widowed. Approximately 14 percent had completed a

primary level education, 32 percent had completed a secondary level education, 36 percent a high school or technical education and 17 percent post-high school. Approximately half (48%) reported some form of employment. Eighteen percent reported either having no stable residence (shelter or hotel room) or being homeless.

The ethnographic data analysis involved four inductive strategies that proceeded sequentially (LeCompte & Schensul, 1999; Ragin, 1999; Straus & Corbin, 1990). The first strategy, item level analysis implemented a form of unrestricted initial coding consisting of a line-by-line reading where item codes were identified. A “constant comparison” analytical process was conducted where codes within a given interview and across interviews were compared. Next, a pattern level of analysis stage was conducted to establish linkages among the item codes and develop potential classifications and categories. The third strategy, structural level of analysis organized relationships among patterns of the data into larger thematic dimensions. The fourth strategy, interpretation, consisted of defining the broad dimensions and specific variations that distinguished the patterns of crack use. These analytical dimensions were then used to construct a typology of four polythetic classes (Bailey, 1973).

Results

Dimensions of Crack Use Patterns

Five distinct dimensions emerged that are central to categorizing the patterns of crack use behavior among these diverse individuals. The first dimension was frequency of use. At one end of the frequency continuum were individuals who use crack only once or twice a month and were considered low to moderate or casual consumers. These individuals were often polydrug users of marijuana, pharmaceutical pills, and alcohol. At the other end of the continuum were individuals who were frequent and habitual users. These individuals were often daily users or tended to engage in episodic bingeing two to three times a month.

The second dimension was duration of use. Some respondents had been smoking for only a short time (some had just initiated use and others had used for 2 years or less) and maintained low frequency of use. However, others had been using crack for a short time but quickly escalated their use and had been using for more than a year by more casual consumption patterns. This dimension is particularly important given that previous research has established that duration is highly associated with escalated use and increased consumption.

The third dimension that distinguished patterns of crack use was the setting in which crack was being used. Some participants reported using crack in public places such as street corners, outdoor plazas, alleyways, apartment courtyards, and playgrounds. Some used crack in semipublic places described as *fumaderos*, which are analogous to crack houses or shooting galleries reported in the U.S. This dimension included semipublic spaces in which crack was used with highly selected acquaintances. Others used crack in private residential settings, usually their own homes or those of other crack users.

The fourth dimension was social networks. Networks facilitate certain behaviors through social diffusion, influence, and reinforcement (Neaigus et al., 1994; Sherman, Smith, Laney, & Strathdee, 2002). These do not shape risk behaviors in themselves, but rather facilitate or impede crack use. Some crack users had social ties that were predominately with other crack users, or individuals involved in illegal behaviors. These users usually reported lifestyles that were organized around goals related to drug acquisition and use. For crack users engaged in networks with ties to mostly nondrug users, the drug was not central to their lives.

The last dimension was work or other social contracts that imposed responsibilities. In general, residents in the *colonias* (neighborhoods) from which participants were recruited acquire resources from their participation in Mexico's informal economy (Finnegan, 2010; Lacey, 2010), which accounts for approximately 30% to 40% of the country's gross national product. For these individuals, the consequences of their proscribed role (in either the formal or informal economy) meant they had to schedule their crack use around their work-related obligations. Therefore, many of these individuals would smoke crack after fulfilling their economic or social responsibilities. In particular, women with children had to structure their crack use around their child care commitments. Others were engaged in illegal or legal vocations (e.g., washing car windows, street vending, selling drugs, sex work, and informal part-time work).

Typology of Crack Users in Mexico City

These dimensions provided the multiple axes that allowed us to cross classify each individual case into a typology that characterized the specific patterns of use that distinguished among the crack users and provided a sense of the nature of crack use in Mexico City. The dimensions functioned as hermeneutical tools for our final analytical strategy of interpretation. In the process of interpretation, we assumed the “abductive attitude”. We challenged our old a priori assumptions of crack use with newer understandings based on the application of the 4 dimensions in concert with knowledge gained from our ethnographic fieldwork (Reichert, 2004). The end result of this hermeneutic process was the four-fold typology (see Table 1). These types provided an abstract and systematic “thick description” of the polythetic classes that were defined by a strong “family resemblance” of cases without necessarily sharing identical items, patterns and structures that emerged in our first three analytical strategies (Needham, 1975). Through these four types we arrived both an inferred framework for reducing the complexity of our data that resulted in a realistic image of the varieties of crack users that would be useful for further theory development.

Dabblers—A dabbler is a crack smoker usually in the initial phases of crack use or an infrequent user. Many participants classified as occasional users had jobs, family obligations, or other responsibilities. Most maintained meaningful relationships with nondrug users, perceived their use as a small part of their lives, and did not identify themselves as a *piedroso* (crack head). For many in this category, they were able to restrict their use to one to three times a month or less and used only a small amount, usually on the weekends or late in the evening. Often their use was predicated on the situational availability

of crack from others in their informal leisure social networks and took place after long periods of drinking alcohol and using marijuana. They were often initiated into crack use by a close acquaintance who was a more frequent crack user and were often exposed to crack on several occasions before initiating their use. Typically, dabblers were individuals with previous histories of polydrug use who said they avoided use due to the negative perceptions of crack users and the perceived consequences of use.

José, an 18-year-old recent graduate from *la preparatoria* (high school), lived with his parents in Iztapalapa and worked in a graphic design shop. He reported using marijuana and methamphetamine and participated in various drug scenes with youths in Iztapalapa and other urban colonias. For instance, José spoke about participating in the local rave scene when he was in *la preparatoria*. José noted that during the last three years, crack cocaine became highly accessible in Iztapalapa with *puntos de ventas* and *fumaderos* found every few blocks. *Puntos de ventas* are local sites where illicit drugs are distributed to residents in these neighborhoods. As previously noted, *fumaderos* are public or private spaces where crack is smoked. Shortly after José's exposure, an increasing number of his acquaintances and neighbors began smoking crack. It became difficult for him to avoid *piedrosos* and he is now an occasional user. At the time of the interview, José said he smoked the previous night after returning from work and encountering his young neighbors smoking crack. He said he often felt pressured to smoke with them.

Coming from work they were hanging out on the block smoking. I know they smoke daily. They were there last night smoking. They asked me to join them. Well the desire is there, you know? You crave it ... but I tell them, "No. I better go." They say, "Stay a while," and I do and they invite me to take a hit. I took a hit, then I bought one, took it and then I left.

Although he said he enjoys the high associated with crack, he added that the cost associated with use prevents him from using crack more frequently. He explained: "I'm not one to do it often because it is goddamn expensive. So, I do smoke but it's like every two weeks. Sometimes a few months will go by and I don't smoke, depends on my economic situation."

Carlos, a 26-year-old polydrug user, said he is an infrequent crack user. He was living in a low-income *vecindad* with his mother in Cuauhtémoc. In Mexico City a *vecindad* is an older building with multi-units built around a central court yard. He reported being a habitual user of marijuana and an occasional user of *tachas* (prescription pharmaceutical pills) and inhalants popularly referred to as *monas*. He said he had various jobs during the previous few years, including working as an office clerk in a real estate office and selling T-shirts and sportswear on the street. At the time of the interview, his primary source of income was selling marijuana. His primary networks were composed of individuals similar to him in that they are mostly unemployed men involved in the city's informal street economy. He started smoking crack in *la preparatoria* with some older students when he was 17 years old. Carlos said he smokes crack mostly on an intermittent basis, usually with *valedores* (street acquaintances).

Stable user—Stable users of crack are individuals who manage to control and limit their crack use. Many of these individuals are intermittent users and have socially structured daily

lives that serve to reduce harmful consequences of their crack use. Similar to dabblers, some have a source of stable employment in the informal economy. A distinguishing characteristic of stable users in this study is that their social networks featured a mixture of crack users and nondrug users. Many reported a preference for other substances such as marijuana, tachas, inhalants, and alcohol, but said they were frequent users of crack. Some had previously been chronic users but reduced their use due to personal and monetary negative consequences related to their crack use. Most of these stable users had stable residential arrangements, often living with spouses, steady partners, or family.

Mario reported being a crack user for about 10 years. He said he supports himself by operating a fruit and vegetable juice street stand on one of Coyoacan's busiest intersections. He began this informal business about 7 years ago after he divorced his second wife and moved into his older parents' home. He said this marriage failed, as did his first, because of his persistent crack use. He stated, "I did not try to hide my crack use from my wives, but they eventually got tired of my behavior and left me."

Mario said he spends all day attending to his business then comes home at night and smokes small amounts of crack and marijuana alone in his room. He said, "As long as I stay in my room or go to the roof to smoke, my *jefitos* [parents] don't bother me." He said he prefers to engage in these activities alone rather than on the street or with other crack users.

I don't go out. I stay in my pad. Basically that's what I do. All day I sell juices and in the afternoon I break down my stand, store my material, and go to my house. I lock myself in my room and stay there smoking crack and marijuana. Sometimes I go out and meet friends at parties. But I don't look for anyone to smoke with.

Juanita, a 26-year-old transgender sex worker living with HIV, was residing in an inexpensive apartment located in a vecindad adjacent to *El Centro Histórico* (the central historical district) with her mother and siblings. Juanita described her pattern of crack use as intermittent. She said she uses frequently but only in small amounts and on certain occasions, such as when "there's parties or other types of get-togethers with friends." Her current social network was mainly composed of other transgender sex workers and her family. Juanita said the primary reason for her more controlled use is her perceived declining health and the emotional and economic support provided by her family.

"Piedroso" (Crack Head)—These users are deeply immersed in networks composed predominantly of other crack users and sellers. They are chronic users and highly engaged in behaviors focused on the acquisition of resources to support their crack habit, usually illegal activities. Their primary identity within the community is that of a *piedroso* which can be an equivalent translation for the widely used term of crack head (used from this point on in this text). Their lives revolve around smoking crack and acquiring the resources to purchase it. This lifestyle has estranged them from individuals with more stable and conventional lives. Many participants in this category reported having unsuccessful experiences with institutionalized treatment programs and self-help groups such as *anexos*, or non-government-sanctioned drug rehabilitation programs. Most respondents reported having only negative experiences with anexos (Instituto para la Atención y Prevención de las Adicciones en la Ciudad de México, 2014).

Sofia, 23, reported being a habitual user of crack for 3 years. She was single, unemployed, and living alone in an apartment in a four-story *vecindad* near El Centro Histórico. She described the extent of her dependence on crack:

If I have 40 pesos it's destined for *piedra* (crack), if I have 200 pesos it's going to be spent on it. I have nothing else on my mind. If I had only 10 pesos I wouldn't think about not consuming today. I would think I am 30 pesos short, how am I going to get the rest.

Most of Sofia's social networks were composed of other chronic crack users with whom she engaged in petty criminal activities, preying on shoppers and others who frequented her neighborhood. Sofia said she stopped using for about 3 months when she voluntarily admitted herself to an anexo. But she described it as a “horrible experience and once I left I immediately started using again.” She is estranged from her family because she has on several occasions stolen her parents’ jewelry, watches, household appliances, and other valuables.

Paco, a 22-year-old, was unemployed and intermittently living with his mother, step-father, and three siblings. He said he mostly stays with friends or out in the streets. He said he has been using crack for approximately 2 years and has had a compulsive pattern of daily use.

You know, I use every day. Within a period of an hour I will smoke up to four *papeles* [small rocks sold and packaged in pieces of paper that cost up to 10 pesos]. As soon as the high is gone, I want more and more. I tell myself that I am going to save some for later but the next thing I know it is all gone. The best part is the taste but the worst part is how you feel after.

He proceeded to describe how the week before he bought more than 800 pesos of crack in one of the most well-known drug markets in a local *colonia*. He said he has an extensive neighborhood-based network of friends who are crack users and who facilitate his consumption. “The best part is my friends and the binge parties. If I buy some, I give them and if they buy some, they give me. Everyone trusts each other that somebody will have crack.”

Old head—Old heads are long-term continuous users who manage to live relatively stable lives. In the U.S. these would be identified as OG (older gangsters) or *veteranos* (veterans) in Mexican American U.S. barrios. They are able to support themselves and sustain their crack use primarily through low-risk illegal pursuits. Another distinguishing characteristic of this category is the composition of their social networks, which consisted of a mixture of crack users, polydrug users, and heavy consumers of alcohol who were engaged in different levels of criminal activities. Participants classified as old heads usually had long histories of drug abuse and involvement in a variety of drug treatment systems. They had a high level of street credibility and respect among residents due to their knowledge of the street culture and drug scene in their *colonia*. Many had long serial incarceration histories.

Pedro, a 43-year-old from Iztapalapa, was occasionally living with his wife and three children in a rental apartment in an extremely dense and poor area of the delegación. He said most of the time he lives with friends who are frequent crack users. Pedro stated, “I made it

home recently with just 100 pesos from my two weeks' paycheck. I said „No, no way, what am I doing? I'm an asshole.' But I didn't quit.” He added later, “I smoke only about three *papeles* a day now compared to before when I smoked up to eight. Also, I prefer to smoke alone or maybe with another person who has control over their use. These are older guys.”

Pedro was intermittently employed in various jobs but currently selling used *chácharas* (household items), and was part of an Aztec dance group that performed for shoppers and tourists in the *Zocalo* (Mexico City's central plaza). He said he was previously involved in a stolen car ring operated by men affiliated with a drug gang that had relocated to Iztapalapa which is notorious for headquartering numerous criminal gangs. Pedro said he is also one of several men who takes care of an elaborate glass-encased street altar to Santa Muerte (the patron saint of criminal and drug users) that is common in these *colonias*. Pedro is highly respected in his neighborhood by drug users and others criminal. He said that he thought about stopping his crack use, but finds it difficult because many of his neighbors, friends, and family members in the *colonia* are *piedrosos* and sellers of crack and other drugs.

Alberto is a frequent crack user. He spent 14 years in prison on a homicide charge. Upon his release from prison, he immediately started to smoke crack with his old friends. In a short period of time, he became a habitual user. Alberto learned to cook crack in the neighborhood of *Tepito*, where he grew up. This neighborhood is known for its high crime rate and open – air markets where counterfeit goods are sold. He said, “You had to cook the crack yourself. Now, it's everywhere and it is easier to get and it's cheaper. Crack is what everyone's doing now.” Alberto works as a waiter in the Garibaldi Plaza which is surrounded by clubs and bars and itinerate *mariachi* musical groups catering to tourists and some locals. Residents in this area are highly organized into strong associations of street vendors and community-based organizations, making it difficult for law enforcement and other city officials to police the area. This area is known as a high-risk location given its lack of security. Visitors and shoppers are susceptible to robbery and assaults by persons like Albert and his friends. He also talked about how he supplements his income by buying powdered cocaine and cooking it into crack rocks.

Conclusion

We have presented a framework for describing and understanding the emerging crack use patterns in the context of a marginalized urban population in Mexico. We constructed a framework along specific dimensions that resulted in a typology of crack users. Our findings of the crack head type generally corroborate the compulsive crack user that has been documented in most studies conducted in the U.S. and Western European countries (Barrio et al., 1998; Blanken et al., 1999; Khouzam, Mayo-Smith, Bernard, & Mahdasian, 1995; Oliveira, Ponce, & Nappo, 2010; Pérez, Cruyff, Benschop, & Korf, 2013; Rosse et al., 1993). Similar to this existing research, our study found evidence of a user estranged from conventional social networks and involved in street-based illegal lifestyles focused on the acquisition of crack.

Despite the above mentioned similarity, three important findings can be drawn from our study that distinguishes crack users in Mexico City from those widely documented in U.S.

and European studies. First, frequency patterns of crack use for many users in Mexico City tended to be more self-regulated and less problematic, characteristic of the dabbler, stable user and old head type. The concept of self-regulation implies that the drug user is consciously controlling different aspects of drug use avoiding problematic use or dependence (Noto et al., 2004). The relevancy of self-regulation for this population is reflected in our respondent's accounts of their ability to maintain their consumption patterns without major disruption to daily social functioning. This finding adds to the scarce literature in the U.S. (Daniulaityte, Carlson, & Siegal, 2007; Domanico & Malta, 2012; Jackson-Jacobs, 2004; Johnston et al., 2014; Sterk, 1999; Waldorf et al., 1991) and the emerging studies in Latin America (de Oliveira & Nappo, 2008) documenting controlled patterns of crack use.

Second, contrary to previous studies, our findings suggest a non-linear progression of crack use that does not necessarily lead to dependence. That is, an overwhelming majority of crack users did not transition from frequent intranasal use of powder cocaine to crack, a pattern previously found in U.S. and European studies. In fact, the data indicates that our sample was mainly using marijuana and alcohol before initiating crack. Although our sample does not reflect this linear progression, it would be expected that given cracks documented rapid maximum physiological effects and greater potential for abuse (Hatsukami & Fischman, 1996), the crack head type would be the most highly represented in our typology. However, this was not the case with the controlled to moderate user types more commonly represented. Our typology contributes to the recognition of a non-cocaine progression that does not necessarily result in highly compulsive and frequent crack use patterns.

Third, the inclusion of the dimensions pertaining to setting, social networks, and social contract in the construction of our typology provides a more comprehensive understanding of the self-regulation and non-linear crack use patterns found in the study (Procuraduría General de Justicia del Distrito Federal, 2009). The appreciation of the subtle yet complex nature of the circumstances in which crack patterns emerge has often been overlooked by drug researchers. For instance, dabbler and stable controlled users reportedly consumed in the presence of close-knit social networks made up of family and friends within safe nonpublic places while engaged in some form of work or vocation. The old heads in this study had a similar use pattern, although they tended to be more frequent users, albeit controlled, and embedded in social networks that included other crack users and individuals engaged in criminal behaviors. As a result, the lives of old heads were relatively more socially problematic in comparison to their counterparts. To our knowledge, this type has not been described before in the literature and may represent the specific interaction of our three dimensions of setting, social network and social contract that is unique to the *colonias* of Mexico City. Nonetheless, crack users in Mexico City tend to be more embedded in more conventional social networks, allowing them to be more involved in more non-drug normalized situations compared to their counterparts in the U.S. and Western Europe. This situation may be generalized to the specific context of Latin America as suggested by the most recent research in Brazil (de Oliveira & Nappo, 2008).

Upon close examination of the literature, the findings above support those found in some studies in which crack use was linked to a particular social environment characterized by the

boundedness of the spheres of users' social lives, such as middle-class college students (Jackson-Jacobs, 2001, 2004). Similarly, our findings extend Decorte's (2001) process of self-regulation found among cocaine users in Belgium that enables them to transition to controlled use and prevent disruption of their everyday lives. This is a dynamic process dependent on context and situation (Van Der Poel & Van De Mheen, 2006). These factors may also apply to more marginalized populations such as the persons interviewed in this study. That is, users with some bounded social structure (e.g., employment and family responsibilities), contact with people engaged in more conventional lifestyles, and greater knowledge of the drug culture (e.g., old heads) may manage to avoid the social pitfalls associated with crack.

The findings above need to be interpreted within the unique social context that may explain the observed pattern of controlled use, which is different than earlier descriptions of crack use in U.S. and Western/European societies (e.g., Connolly, Foran, Donovan, Carew, & Long, 2008; Sterk, 1999). The emergence of crack cocaine in Mexico City evolved in the absence of an extreme social response or moral panic focused on the deleterious effects of crack cocaine, as seen in the U.S (Reinarman & Levine, 1997). As a result, crack use in this context may be less stigmatized contributing to the predominant moderate to controlled use pattern. Also, the neighborhoods characterized by crack use emerged in the context of poverty and marginalization and an informal economy buttressed by strong associations of street merchants, community-based organizations, active political parties, and the absence of effective social and drug treatment services. As a result, residents in these communities have developed an exclusive informal or extralegal economic and social system that meets many of their needs. This includes a continuum of illegal activities including *narcomenudeos* (small-scale crack or drug selling) that operate alongside many other market activities providing a wide range of economic opportunities (Zamudio Angles, 2012). In these communities, crack use is accepted as long as it does not disrupt the established social and economic order. This is distinct from poor urban Black or Hispanic communities in the United States, in which selling crack is one of the few economic opportunities for young men (Bourgois, 1997; Dunlap & Johnson, 1996; Williams, 1992). Last, researchers must be aware, as Hart (2013) argued, that problems experienced by crack users may be primarily the result of structural inequalities and have little to do with the presence of crack or other illicit drugs. This may be the case in Mexico, where illegal drug use appears inextricably linked with the social context and social environment that has normalized otherwise socially deviant behaviors.

Limitations of our study need to be acknowledged. The generalizability of our findings is limited to specific samples and settings identified, with participant's accounts of drug use patterns as the basis of analyses. These findings require further epidemiological study to estimate the prevalence and nature of crack patterns. Also, the relatively small sample requires further qualitative studies on the self-regulation of crack use pattern with larger samples in diverse underdeveloped and developed regions. Nonetheless, confidence in the generalizability of our typology and findings is increased in that we were able to find and distinguish patterns that have emerged, even though also in a limited matter, elsewhere in distinct contexts (de Oliveira & Nappo, 2008).

This study presents a typology that untangles how patterns of crack use are influenced by the dimensions of setting, social networks and social contract and the larger context. This study emphasizes the need to go beyond the one model fits all stereotype and recognizes the distinct types that represent variations of use (Daniulaityte et al., 2007). A major finding from the analyses is that crack use can be self-regulated and absent of more severe substance use dependence characteristics. Overall, our study points to the need for a harm reduction approach in Mexico that targets the diversity of users and promotes safer crack use behavior associated with the decrease of health-related harms. As crack use spreads in Mexico and other Latin American countries, additional research is needed to improve the existing knowledge base. Nevertheless, our typology can be used to inform specific drug policy-making aimed at preventing the potential for crack dependence and related harmful health consequences.

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Highlights

- Mexico and other developing countries experiencing increased crack use.
- Polythetic typology includes dabblers, stable users, crack heads and old heads.
- Crack patterns self-regulated and less problematic and embedded in everyday life.
- Mexico City's disadvantaged social context explains crack use patterns.
- Responses to crack in Mexico require distinct tailored health and social responses.

Table 1

Typology of crack users in Mexico City (*N* = 156)

Type	Frequency of Use	Duration of Use	Setting	Social Network	Social Contract
<i>Dabbler</i>	Occasional	Initiation phase	Semiprivate	Nondrug users	Stable work, family; conventional social obligations
<i>Stable user</i>	Intermittent	Previously compulsive, long-term	Private	Crack users, nondrug users	Stable work, family obligations
<i>Crack head</i>	Compulsive, frequent	Medium-term	Public, semipublic	Crack users, drug sellers	Highly unstable, chaotic; no social obligations
<i>Old head</i>	Frequent, episodic	Long-term	Private, semipublic	Crack users, polydrug users, alcohol users	Stable work, illegal activities; minimal social obligations