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Unintentional Injury, Supervision, and Discourses on Childproofing Devices

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Abstract

Unintentional injury prevention research focuses on parental supervision as critical to reducing toddler injury. We examine how the promotion of childproofing—as a mode of supervision—sells mothers "peace of mind" while also increasing "intensive mothering" and the "privatization of risk." Drawing on the childproofing literature and meaning centered interviews with mothers of toddlers and childproofing business owners, we argue that the connection made by these groups between childproofing and "good parenting" ultimately obscures how this form of harm reduction economically and socially individualizes responsibility for child care.

Keywords

United States; child supervision; intensive parenting; parenting culture; risk; unintentional injury

The safe haven that is home is full of hidden dangers—childproofing your home provides protection to both your children and your property. Childproofing can save minor injury, and often permanent disability or in some cases lives. It has become a billion dollar industry in the United States and Canada where there are over 20,000 qualified professionals (Child Alert, Childalert.co.uk).

Unintentional injuries, or what are commonly called accidents—such as falls, drowning, poisoning, insect bites, and traffic-related accidents, continue to be the leading cause of death for children between the ages of one and four (CDC 2015) and the second leading cause of hospitalization for the same age group, after medically-related complications (CDC 2011). The deliberate shift from the word "accidents"—which describes random, unexpected and thus unavoidable events—and toward "unintentional injury" re-conceptualizes these

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injuries into events with causes and influencing factors; they become preventable and manageable events that are amenable to public health research and intervention (IOM 1985; Bonilla-Escobar and Gutiérrez 2014). Consequently, unintentional injury research has increased since the 1980s and 1990s (Institute of Medicine and National Research Council [IOM] 1985, 1999; NRC 1985, 1988). A primary strategy for preventing unintentional injury proposed by public health researchers is the "three Es": Environment (product design and modifying the living environment), enforcement (policies and legislation), and education (disseminate information that enhances individual behavior modification). Originally developed by Jeremy Harvey in 1923 (Sleet et al. 2011), this social ecological perspective contributed to the Haddon Matrix (Baker and Haddon 1974)-the most popular paradigm for studying causes in the field of injury prevention. The goal of the Haddon Matrix approach was to engineer solutions that removed human error as one component in the causes of injury. Safety was to be factored into design and manufacturing rather than being dependent on human responsibility, which often led to victim blaming. This approach to injury causation focused attention on how and where to collect data necessary to develop environments, enforcement, and education (the three Es) to prevent injury, identify causal factors, and to propose and implement policies to transform the environment (Bonilla-Escobar and Gutiérrez 2014). These efforts have influenced a host of legislative changes from child-proof bottles, automobile safety belt use, and amusement park safety measures (Cohen and Swift 1999; Haddon 1980; Moghisi, Mohammadi, and Svanstrom 2014; Van De Voorde et al. 2014). At the same time, the focus on environmental modification along with the recent increasing creation of products to mitigate risk of injury have become linked to philosophies of parenting and individual consumption.

In 2002, the National Center for Injury Prevention and Control (NCIPC) put forth a national research agenda for injury prevention and prioritized supervision as the primary concept in need of refinement and measurement. "Supervision is generally considered one of the strongest vet least understood protective factors against many types of home and community injuries" (NCIPC 2002:23). Supervision, however, requires supervisors, which raises a host of questions, e.g. who is responsible for supervision? How should he or she supervise? What does supervision look like? And so on. These are value-laden questions inherent to the science of injury prevention. They have the capacity to create options for increased safety or they can elide economic and gendered complexities depending on how they are approached. We discuss how mothers defined supervision for injury prevention in the home. Specifically, we examine the discourses and practices surrounding child-proofing-which we define as the use of safety devices to modify the environment for the purpose of preventing unintentional injury. Drawing on qualitative interviews from mothers and business owners who sell childproofing products, we examine the intersection of mothers' definitions of supervision and their understanding of how environmental modifications enhance their definition and practices of unintentional injury prevention.

Childproofing did not always refer to the protection of children from potential hazards in the environment. The transformation of the concept over time reveals how safety devices became integrated into the development of good parenting. In the mid-twentieth century, advertisements in print media used the word "childproofing" to refer to the protection and maintenance of property from "boisterous" young children (Kellogg 1958; Pepis 1950; Reif

1957). Childproofing literally meant to proof an object from a child or to make an object resistant to a destructive child. It was not until the early 1970s, when the Food and Drug Administration legally mandated "childproof" packaging for poisonous substances (CPSC 2005; Poison Prevention Packaging Act 1970) that the meaning of childproofing shifted from protecting the object to protecting the child through products designed to promote child safety. Legislation focused on product changes that achieved the goal of the Haddon Matrix by affecting all levels of society, rather than changing individual behaviors or making safety available to only those who could afford the technology. This mandate significantly reduced the incidence of child poisonings (Consumer Products Safety Commission [CPSC] 2005).

The focus on child supervision promotes a return to the individual as the locus of control for preventing unintentional injuries. Our definition of childproofing coincides with the definition used by the mothers in the study: childproofing refers to products used to modify the home for the purpose of child safety. It does not refer to child safety measures that have been designed and embedded into the environment or as a non-optional component of an existing product (e.g. child resistant packaging). Since most accidents occur in the home (NCIPC 2013), the shift to supervision intensifies individual parental responsibility for child safety. Given the long history of capitalism and the social practice of keeping middle and upper class women in the home to birth and care for children, a child's injury is often viewed as a fault in a mother's parenting skills rather than a father's (Hays 1998). Faced with the uncertainty of unintentional injury and potential blame (from gossiping neighbors to being reported to child protective services), mothers are expected to develop methods for supervising and creating safe spaces. We examine the construction of child safety devices as "moral commodities" signaling "good parenting" by mothers and childproofing business owners. We argue that the childproofing industry relies heavily on selling the image of parental agency and control to support parents' need to appropriately care for their child.

Background

Agency in injury risk and prevention

Media stories about injuries caused by recalled children's toys, toddlers left in hot cars, swimming pool drownings, and other tragic deaths present a host of concerns for parents. While these horrific cases are exceptional events, the severity of their consequences affect parental thinking about everyday risks to their children. The preoccupation with identifying, managing, and preventing risk is a distinctive feature of modern society (Beck 1992; Giddens 1991), and has framed parents as risk managers for children. The "parenting culture" literature argues that beyond the safety of children, the enactment of daily routines of care are integral to debates about parenting and its affects on society (Bristow 2009; Lee, Macvarish, and Bristow 2010). Concern over the safety of our future, whether defined by financial stability, climate change, or health has led to systematic methods and technologies for managing hazards threatening that future. Discourses about risk raise questions of responsibility, which have led some social scientists to call attention to the "privatization of risk:" social and economic policies that previously reduced harm by sharing risk across the public have shifted, so that "individuals bear the brunt of hardships that are predictable in the statistical aggregate without creating effective mechanisms to share the burden, let alone

reduce the risk" (Calhoun 2006: 257). This heightened sense of vulnerability increases the use of harm-reduction strategies to prevent consequences associated with perceived and real threats (Nichter 2003; Lupton 1999; Singer and Erickson 2009).

One of the primary responsibilities of parents, as reflected through child-rearing practices, is to ensure children's safety (Morrongiello and Schell 2010; Quinn 2005; Weisner and Gallimore 1977). Parents must avoid the risk of child injuries, or they may be viewed as inadequate caretakers. Failure to avoid the former gives rise to the latter. Without possessing the correct knowledge or creating positive physical and learning environments, parents themselves become a risk to their child (Furedi 2008). Drawing on Foucauldian notions of discipline and governmentality, Lupton (1999) argues that risk-avoiding behavior is intimately linked to knowledge about the self and is therefore a moral enterprise. Parents with the knowledge and ability to manage child safety are represented as moral individuals and "good parents." Mark Nichter (2003) builds on this idea in his theorization on risk and harm reduction, explaining that

Harm reduction [is] both an expression of agency and a form of manipulation. As an expression of agency, harm-reduction practices reduce a sense of vulnerability and enhance a sense of self-control. As a form of manipulation, harm-reduction practices are fostered at the site of the individual body by parties who wish to deflect attention away from risk factors affecting a population's health (13–14).

Although childproof installations in the home may provide a sense of control for parents individually, the overemphasis on these devices shifts blame onto parents' behavior rather than the harm embedded in the unequal distribution of resources in the built environment. We argue that knowledge and management of unintentional injury risk can discursively create the "good parent" (who consume the right products and live in nice homes and neighborhoods) and obscure the social processes that increase risk for injuries from falls, burns, drowning, animal bites, and objects falling onto the child in homes where transforming the space is prohibited by the property owner or as a result of neglectful or intentional policies regarding care of the space.

Research on the consumption of health products as a marker for individuals knowledgeable about their health and safety is directly relevant to parenting and childproofing devices (Metzl and Kirkland 2010). A consumer-oriented perspective enhances the belief that the best approach to preventing unintentional injury is to engage in the market, so to purchase "innovative" and "effective" modes of safety care. The commodification of parenting creates a new institution for capital exchange and accumulation. Transforming the noun "parent" into a verb "parenting" through consumption exposes how childproofing becomes a form of governmentality shaping the subjectivities of parents (Foucault 1991). Eleff and Trethewey (2006) argued that consuming parenting discourse through magazines, other media, and purchasing products that represent one's concern with being a good parent are a form of self-improvement. Engaging in these practices leads to a moral imperative, a demonstration of good citizenship and an "entrepreneurial self" (Miller and Rose 1990). In a critique of gendered expectations of child-rearing, Hays (1998) uses the term "intensive mothering" to describe a dominant view of parenting that is "child-centered, expert-guided, emotionally absorbing, labour-intensive and financially expensive" (1998:8). The cultivation of

"entrepreneurial selves," "intensive mothering" and general "good parenting" is complicated by parents' competing demands and access to safe environments and technologies (McMullin and Dao 2014; Olsen, Bottorff et al. 2015; Olsen, Oliffe et al. 2015).

Childproofing and "good parenting" in injury prevention research

For toddlers aged one through four, the home is a primary site of unintentional injuries (Kerr 2007; Schwebel, Gilliland, and Moore 2009). Consequently, research has focused on parental perceptions and management strategies for in-home injury risks (Gaines and Schwebel 2009; Morrongiello and Kiriakou 2004), determinants of in-home injuries (Flores, Tomany-Korman, and Olson 2005; Greaves et al. 1994; Hapgood, Kendrick, and Marsh 2000; Matheny 1986), and intervention strategies and their efficacy (LeBlanc et al. 2006; Posner et al. 2004; Watson et al. 2005). While these studies convey the importance of active parental supervision, i.e. watching and being physically near the child, there is implicit and explicit support for the use of childproofing devices. An early study by Dershewitz and Christophersen (1984) explicitly favors the passive approach of safety device use because "there is little reason to suspect that parents will substantially alter their own behavior" (88). Despite the current emphasis on parental involvement as supervision, there are continued calls for more research on less intensive supervision strategies for parents who may be unwilling or unable to provide active supervision (Greaves et al. 1994; Morrongiello, Ondejko, and Littlejohn 2004).

Research conducted by Watson and colleagues (2005) and Posner and colleagues (2004) strengthens the association between good parenting and safety device use. In these studies, researchers distributed safety devices to families to determine whether or not parents would improve safety practices and reduce injury risk, equating childproofing with the ability to keep a child safe. For example, in evaluating homes with toddlers, LeBlanc and colleagues (2006) categorized a hazard as the absence of childproofing devices. Likewise, Greaves and colleagues (1994) identified a lack of devices as a physical environmental risk. In studies that did not provide safety products and installation, childproofing was suggested as an important intervention to prevent in home-injuries (Flores, Tomany-Korman, and Olson 2005; Gielen et al. 1995; Hapgood, Kendrick, and Marsh 2000). Even in this brief review, there is a pattern of using quantitative measures to institutionalize a link between the presence of safety devices and good parenting.

Yet despite the implicit connections between childproofing equipment and child safety, there appears to be no direct evidence to support that childproofing the home reduces injury (Kendrick et al. 2007, 2013; Lyons et al. 2006). Why, then, does childproofing continue to be an important part of parenting and injury prevention? To better understand how childproofing devices become a technology for harnessing risk, we consider their discursive role in creating responsible individuals who know how to care for children. We examine the development of "good parenting" from marketers, and mothers' perceptions of childproofing devices and their perceived ability to transform and control their home.

Methods

Setting

The data described in this article are part of a larger, four-year study (2007–2011) conducted in Riverside County, California. We previously reported (McMullin and Dao 2014) that in 2007, inland southern California had one of the fastest growing populations in the United States and the eleventh highest population density in the state. The 2007–2011 American Community Survey estimates a total population of 303,871 in the city of Riverside (US Census 2010).

For this study, we recruited mothers who were 18 years or older and had a toddler between the ages of one and three years old (McMullin and Dao 2014). The decision to focus on mothers was guided by previous injury prevention research, and supported by current research demonstrating that mothers take more active role than others in supervision of infants and young children (Damashek and Kuhn 2013). Women enrolled in the study self-identified as Latino or White and spoke English only, Spanish only, or were bilingual. Recruitment occurred at multiple sites: community organizations; referral by mothers who had already participated in the study; impromptu recruitment at a public park; and Women, Infant and Children (WIC) programs, a federally funded program designed to supplement family incomes by providing groceries and free meals. The average age of mothers across all groups in the study was 31. The average family income category was US \$30,000 – \$39,999 per year, with English-speaking mothers having a family income category of US \$50,000 – \$59,999 per year and Spanish speaking mothers having a much lower average family income of US \$20,000 – \$29,999 per year. Ninety percent of the women were married (*n* = 79) or living with the father of their children (n = 18).

Data collection

Data included semi-structured interviews with a total of 108 mothers, recorded fieldnotes of mothers caring for their toddlers during the interview, and interviews with pediatricians (n =12) and registered public health nurses (n = 13) (McMullin and Dao 2014). Two interviews were conducted, each lasting between 1 and 3 hours and were audio recorded with the permission of the participating mother or health professional. The second interview was conducted 3–5 months following the first interview. We were able to contact all except five participants for the second interview. The first interview included open-ended questions included topics that addressed hopes and expectations for mothers' children, narratives relating to incidents of injury of their own or someone else's child, views of supervision, and their estimations of good and bad supervisors. Other questions included demographic information, access to health care, and whether they thought unintentional injuries could be prevented. We did not establish any a priori responses against which mothers' knowledge was tested, but rather elicited their thoughts on the suggested topic. The theme of childproofing emerged inductively throughout data collection so questions specifically about childproofing were not included in the original questionnaire. Information about mothers' beliefs about barriers as a method of injury prevention was gathered during a second interview.

Fieldnotes included descriptions of the neighborhood where the mother and child lived (e.g. whether the home was on a high traffic or low traffic street, the amount of neighborhood activity, including people walking, playing in the front yard, talking with neighbors), and general outside maintenance of the apartment or house (e.g. in some cases apartment stairwells were rusted and the hand railings were unsecured). Interviewers did not conduct a formal assessment of whether and in what ways homes were childproofed. Observations of use of childproofing devices such as gates, electrical outlet covers, cupboard and refrigerator latches, or door knob covers were recorded along with any mentions of using such devices by the mothers.

As the theme of childproofing began to emerge, we wanted to contextualize the popular messaging mothers may receive by collecting supplemental data on childproofing. We performed an Internet search using the terms "childproofing" and "childproofers" to find out how the industry portrays childproofing devices. We selected the first ten childproofing business websites listed that offered consultations and products to parents. Businesses owners were contacted for interviews and two agreed to be interviewed. These child safety business owners responded to a short semi-structured questionnaire that garnered responses about their industry and their philosophy on child safety devices and supervision.

Analysis

Interviews were transcribed and coded using a grounded theory approach (Bryant and Charmaz 2010). Our analysis focused on emergent themes including: good parenting, common dangers, perceptions of control, and usefulness of childproofing and barriers. After the first reading of the interviews, the authors re-read transcripts and field notes to code passages where thoughts about and actual use of safety devices were mentioned. Safety device use was categorized into five groups: gates (i.e. baby gates, pool gates), latches and covers (i.e. cabinet and window locks, outlet covers, door knob covers, refrigerator latch, stove cover), monitors (i.e. baby monitors, locating bracelets, sliding door monitors/alarms), restraining devices (i.e. harness/leash), and miscellaneous items (i.e. non-slip shoes). Field notes from the researcher's visits to the participants' homes were also coded for use of safety devices and potential hazards in the home. An analysis of content on the popular childproofing websites and two interviews were also conducted, focusing on contextualing the types of products being sold. The recurring themes included peace of mind, good parenting, and safety, which often included links to injury prevention research.

Results and discussion

Alleviating risk through moral commodities

A chief concern in the toddler injury prevention literature involves developing a working definition and implementation of supervision. Ironically, when discussing parental supervision inside and outside of the home with mothers in our study, interviewers often had to ask follow-up questions to obtain greater clarity on actual practices and concerns that fitted under the category of supervision, revealing how the meaning of supervision was tacitly assumed by parents. Even when someone said that a "good supervisor" watches the child, we had to probe further, asking if supervision meant: (1) constantly watching and

being attentive by checking on the child's activities,(2) interacting with the child, (3) being aware of the surroundings, or (4) allowing the child freedom to develop and explore, or more (McMullin and Dao 2014). Mothers did not report any incidents that required a doctor's visit within the past 6 months. The ambiguity of how to supervise children combined with the uncertainty of injury, and infrequent severe injuries, mediate the relative importance of supervision (McMullin and Dao 2014). Consequently, childproofing one's home is an intentional act stemming from education and economic access. Purchasing these items is therefore constructed as a kind of "moral commodity"—objects purchased to signal good parenting to others.

According to the childproofing industry, purchasing these devices helps a parent provide the "best" and "safest" environment for their small children. Companies draw attention to the risk of injury, thus generating a moral imperative to achieve safety through purchasing "peace of mind." Although business owners maintain that childproofing does not replace the physical act of supervision, they market the idea that peace of mind can be achieved through purchasing their services and products. Safety tips from the Boo Boo Busters website suggest that "accidents could have been avoided (Boo Boo Busters Professional Home Childproofing Services 2011). While there's no replacement for vigilant supervision, proactive childproofing can go a long way toward preventing needless injury." Similarly, the CEO of an online retailer of childproofing devices explains:

Safer homes for kids, peace of mind for parents, you can't watch your kids 24/7 and you can't say 'no' to them all the time either. If you babyproof problem areas, supervision becomes less critical.

While highlighting the tenuous nature of supervision and acknowledging safety devices as a solution towards peace of mind, his statement frames parents as sole providers of supervision with the expectation that parents should be watching their children 24/7, but can't. The Boo Boo Busters website reiterates the same conflict between time, safety, and peace of mind:

A new child requires an inordinate amount of time and attention and your days rush by at a rapid pace. Before you know it your child is mobile! Why not be ahead of the game? Be proactive and get parental peace of mind by babyproofing during pregnancy.

Several mothers expressed concerns similar to Jennifer (age 28), a mother of two toddlers, who echoed the childproofing industry's themes. Responding to our question as to whether watching the child constantly was the best method of supervision, Jennifer states:

I think ideally. And I would like to do it but and you know...we don't live in an ideal world and it's just not entirely possible so that's when you start using the baby gates and all the other sorts of things.

Childproofing delivers peace of mind in two ways: through the perception that its use prevents physical harm, and that these objects create a supportive environment. These supportive environments allow parents to step away from 24/7 intensive parenting. Continuing to build on the value of childproofing devices, this supportive, risk free environment is extended to the child, as another childproofing business owner explains:

We create what I call a 'Yes Environment,' you make a safe area when they are four to seven months when they start moving around and become more curious. It lets them explore and you are not constantly saying 'don't do that' which avoids the negative aspects of parenting. This also gives a sense of independence for the child (Childproofing Business Owner).

Through childproofing, parents no longer need to grapple with the tension between their toddler's safety and their desire to explore. Mothers can build "Yes Environments." However, in positioning childproofing devices alongside images of parents who can "avoid the negative aspects of parenting," the childproofing discourse collaborates with the injury prevention literature in conflating the presence of devices with good parenting.

The consumerist-driven narrative establishes safety devices as moral commodities, where the presence of childproofing devices appears intrinsic to parenting. In defining this quintessential "good mother" who can control for risk and in conceptualizing the "right consumer," Rick, a childproofing company owner said:

I get both career moms and stay-at-home moms. The *good moms* are calling me, the ones in tune with the cutting edge of safety care, child psychology and are educated.

As a practice of harm reduction and manipulation, Rick equates safety device use with being a good parent. Despite research showing the limited efficacy of safety devices in reducing child injury in the home, the assumption for the childproofing industry is that a link does exist. Interestingly, Olsen, Oliffe et al. (2015) noted similar findings in their study of fathers' purchasing of "high-quality consumer products" as linked to being a good provider and protector of their child's safety. As a moral commodity, safety devices create links for the movement from harm reduction to "peace of mind," supportive learning environments, and ultimately to "good moms."

Complicating the "yes environment"

Homes are complicated sites for conceptualizing supervision for mothers in our study. Fortynine percent (48/98) of mothers mentioned that the home, including the backyard, was the safest places to play. Mothers identified the kitchen and stairs as sites for increased risk of injury and spaces where their child needed more supervision. Two of the mothers we interviewed had pools in their backyard. These mothers regarded barriers such as gates and increased watching as the actions needed to decrease the risk of injury. Front yards, however —depending on automobile traffic and potentially positive or negative interactions with neighbors—were more likely to be considered high-risk sites where mothers generally did not permit their children to play. While it may be an effect of our focus on supervision (i.e. how do you supervise a toddler when in your front yard, at a park, or at a pool?) and not the fear of injury in certain places, the mothers we interviewed maintained that watching was a primary and effective method of supervision (McMullin and Dao 2014). If a mother felt that an area was too risky, a space she was unable to control, she and her child avoided those spaces (e.g. mothers who thought pools were places where an injury was more likely to occur, would not take their child to a pool or large body of water). The inside of the home

was the area where mothers believed they had the most control over a toddler's environment, as Amanda said;

Here in my house I have total control over it obviously because I choose what's brought in and what's not and what's watched and what's not and what's listened to and not, so I have a 100% control in my home. (Amanda, age 27)

Control of the environment is equated with agency that provides for her toddler's security. Despite this control, *all* the mothers we spoke with pointed to objects and areas in the home when describing the potential for injuries including falling off beds, pulling televisions or kitchen drawers out and onto themselves, or drowning in the bathtub. The home is filled with contradictory feelings of comfort, safety, and anxiety over potential hazards.

When asked about the use of barriers in their home, mothers often rephrased the question, responding through referencing childproofing devices specifically used inside the home such as gates, latches, covers, restraining devices, and monitors. When posed with the statement "some people have told us that the best way to supervise your toddler is to put up barriers," 63.3% of mothers (62/98) agreed, while 14.3% disagreed (14/98). Mothers who disagreed expressed doubt about the efficacy of barriers over active supervision, and the fallibility of safety devices often saying, "even if you childproof and you think you put everything possible away and it's safe, there's still the furniture, kids, you don't realize it but they [the toddlers], like, tend to find ways" (Ramona, 30). Last, 22.4% (22/98) agreed with the statement that efficacy of safety devices depended on different factors and situations. These mothers recognize that they have some control over their environment, but that control is elusive because of the construction of the space and the agency of the child. For example, childproofing works for smaller children, but older children often discover ways to circumvent the barrier. Women in our study recognized that childproofing was neither the sole method nor the most effective method for supervising a toddler. Yet, the majority continued to use safety devices to prevent injuries. Among mothers who disagreed with the statement that barriers are a good supervisory method, 29% (4/14) used safety equipment in their home. Among women who responded with "it depends," 55% (12/22) similarly relied on safety equipment in their home. The varied responses to childproofing efficacy reveal how even "Yes Environments" can be complicated sites for child supervision.

Enhancement: Creating secure spaces

Childproofing devices enhance a mother's sense of agency, control and "peace of mind" in the home. Mothers valued a space where toddlers were protected from foreseen and unforeseen hazards, but also one where a child could reach beyond their developmental abilities (i.e. their skill at walking and balancing a potential fall, reaching for unsecured objects). This balancing act was a great source of anxiety for mothers. Childproofing alleviated anxiety over the built environment as this modification confined dangers to a specific and knowable area. Donna, a 26-year-old mother of two toddlers who learned how to childproof through friends and "walking down the aisles of Babies R Us," uses several of these devices in her home. Barriers, in particular, allowed her to create a safe space for her curious toddler:

I believe in barriers ... you can watch 'em as much as you possibly can and you still can't watch them quite enough. There's always that chance that the second you turn your head or walk into the other room that they, you know, run right into the kitchen and run right into the stove or open the stove...if you don't have a gate up and that's not closed, they could run in there, open the oven and jump right in, ... I think barriers are good for kids, plus it teaches them the boundaries where, you know, they shouldn't be messing around in the kitchen or, you know, in case there is something dangerous.

Because parents and toddlers are sources of uncertainty, thwarting a guarantee of safety, Donna childproofs the space to assuage her fears, gain control of her toddlers, and cordon off dangerous areas in the home.

Feelings of control over the home and securing safety of children can be mediated by family support and a mothers' level of experience with parenting (Crnic et al. 1983). Although 73% of the mothers in our study reported receiving regular parenting advice from friends and family, 50% of those women received very little practical help in caring for and supervising their children, and 56% of women who received little help in the home also reported the effectiveness of barriers in supervising their toddlers.

Using barriers enhance mothers' peace of mind. Barriers support a sense of control over the environment, passively teach children about house rules, and allow exploration of "safe" areas in the home. As a technology that promotes "peace of mind," these devices connect "responsible" mothers to the ideal of intensive mothering and the embodiment of a "good parent."

Reflection about supervision, control, and the environment often evoked a sense of personal responsibility. During her interview, Rosemary used a baby monitor equipped with image and sound to watch her toddler sleep in another room. When asked about control over the environment, she answered:

I think as a parent we control 100% of their environment...we can choose to, as parents, not have that much control but we have the ability to have 100% control over what opportunity we give them and what we put in their environment (Rosemary, age 40).

Such statements by mothers parallel the sentiments of the childproofing industry and represent assumptions that emphasize the individual agency of mothers while ignoring the question of who has access to safety devices and childproofing consultation.

The presence of safety devices is more important than the actual efficacy of the device or the actions of the people who use such devices. Gayle shared a story about a friend's toddler who had fallen down the stairs at home, but luckily was unhurt. She explained that her friend's husband was supervising the daughter, and although the house was equipped with stair gates, one was accidentally left open. She continues:

In [the father's] mind the gate was closed, then [the daughter is] allowed to explore all of the areas upstairs that's childproofed upstairs, so it's not like you know he

should have been there every moment because they've childproofed it. The problem was that ... they left the gate open, but I don't fault him in the sense like 'oh he should have been there' because he of course thought that the gate was closed (Gayle, age 34).

Although the gate and the father failed to prevent the child's fall, the presence of the stair gate exonerated him from blame. Safety devices symbolize the moral intentions of good parenting even when the device and parent fail.

Mothers at all income levels discussed how safety devices generated peace of mind. Caroline is a 32-year-old English-speaking Latina mother of a toddler and an infant, and Victoria is a 27-year-old Spanish-speaking mother to two toddlers. These married women represent each side of the income scale: Caroline's household earned over \$100,000 per year and Victoria's household earned below US \$29,999 per year. Both women were avid safety device users. For Caroline, gates and doorknob covers created barriers that defined where her 3-year-old girl could move inside the house. Likewise, Victoria believed that gates, alarms, and socket covers bought helped women protect their children from imminent danger. The two women emphasized different reasons for safety device use, but both expressed the same desire to create safe spaces:

Well, I mean since you can't control everything, everything can't be childproofed, the best way to do it is to put up barriers and keeping them out, it's like a good sense of security. Like around the stairs or around a pool, if you know the gates closed you can feel secure your child isn't going to fall down the stairs or fall into the pool, so it's a good sense of security (Caroline, age 32).

So having barriers, prevents the accident from happening, like that, if it is going to happen you can find out that the child ran, that they are running towards the street and the barrier can give you a second, a few minutes to run and reach them. I think that it is good (Victoria, age 27).

Childproofing produces a "sense of security" when dealing with unpredictable children. Safety devices relieve the anxiety of intensive mothering by keeping a child out of specific areas, prohibiting children from entering dangerous areas, or preventing an accident about to happen. Although mothers may hold different expectations when childproofing, the safety devices generate a sense of control over the environment. They allow mothers to represent themselves as having fulfilled the role of a parent who knows their child's behavior, what products are available, and how products can improve the safety and health of children.

Complicating control over risk: Structural barriers to preventing unintentional injury

Despite the desire to control their environment and outfit their homes with barriers and safety devices, several mothers understood the financial burdens in attempting to meet the expectations depicted by researchers and industry. Not surprisingly, our data show that mothers in households with higher income levels, US \$60,000 per year and above, possessed more child safety devices than mothers in lower income households, US \$50,000 per year and below.

During her first interview, Hallie was single, pregnant, and caring for one toddler. She rented a second-floor apartment in a complex with only one large, rusty staircase connecting her apartment to the ground floor. Once on the ground floor, there were no boundaries between the staircase and parking lot, where cars were constantly driving in and out. Hallie, who earned less than US\$20,000 -per year, had to be resourceful. During our interview, she received a phone call from a friend in which she accepted offers for food and shared the news about free school supplies being given away at a local theme park. Her resourcefulness also lent itself to childproofing. She shared her experience in trying to make her home a safe space for her child:

[One of the difficulties of childproofing is] the expense. I spent a whole day at first, I called, I spent three hours in Home Depot trying, after talking to several people about this floor furnace. Trying to figure out what type of barrier to get...you can't cover it. It's going to take a handyman, which I have one hopefully coming shortly. Because wood I was told would burn so they suggested plastic or safety gates... Plastic's gonna melt, gonna be more dangerous. So we thought about some kind of plexiglass, thick plexiglass. But then plexiglass is fifty dollars...a foot. So it's cost effectiveness (Hallie, age 38).

Even after seeking advice to remedy the landlord's neglect of her home, the financial constraint ultimately obstructed Hallie from being able to childproof the area. Despite her efforts to control her environment and keep her child safe, she was unable to fulfill the idealized image of parenting. During interviews with health care professionals, similar structural issues emerged for renters. A pediatric physician explained:

There are a lot of families that I see at the clinic that only sees Medicare/Medical families and in those families, they can only afford to live in this apartment and they don't control the hot water temperatures in the house and they don't control if there's holes in the stairs or if the rail is wobbly or not. They can't control those things, you know, they can write letters to their association or manager but they may or may not get changed so in that population we'll see some issues.

According to health care professionals, a significant number of families are not homeowners and are often at the mercy of landlords when they seek to restructure their living space for a toddler. In our study, 32% (26/80) of households making less than US \$60,000 a year own their homes, while 74% (17/23) of households making US \$60,000 per year or more own their homes. Apartment-dwelling mothers' attempts to prevent unintentional toddler injuries are often thwarted through their landlord's restrictions to using safety devices such as door locks and safety barriers. This trend in homeownership and income matches our finding that higher income families possess more safety devices. If accepted as given that these products are the "best method" in toddler supervision (which, as stated in the review of childproofing literature, they are not: see Kendrick et al. 2007, 2013; Lyons et al. 2006), the lack of financial resources hampers access to the objects necessary to transform the environment and the discursively constructed acceptable space for exploring toddlers.

Conclusion

Safety checks—agency and consumption

Our analysis of risk perceptions and prevention of unintentional injuries from mothers and child-proofing business owners reveals how parenting has become part of larger political and economic trends of privatizing risk (Calhoun 2006). Parents are encouraged to engage in the market consumption of moral commodities for a variety of reasons: to combat the uncertainty of supervision, to manage the risk of unintentional injury, to control the home, and to feel like good parents and to exhibit good parenting. The business owners we interviewed corroborated the increasing trend to purchase childproofing technologies (Mos 2001; Ramirez 2004) with the online retailing CEO explaining to us that his business experienced "phenomenal growth" and record-breaking sales of over one million products within the year we interviewed him. Consulting companies such as Boo Boo Busters of Southern California continue to expand their businesses through franchising. Whether this increase in sales comes from parents with their first born, or parents of multiple children, purchasing these products is arguably a result of the discursive and symbolic construction of safety devices as necessary to controlling one's environment, gaining peace of mind, and ultimately keeping one's child safe as "good moms" are known to do.

Nichter's (2003) insight that harm reduction processes can foster agency and manipulation, while obscuring risk factors affecting population health, apply to this study of childproofing devices. Childproofing technology as a mechanism for harm reduction provides the women we interviewed with a sense of agency in ameliorating unfortunate and unpredictable incidents. The ability to control for the unexpected is expressed when mothers talk about peace of mind in their own potentially dangerous homes. Safety devices however-in their current form requiring parents to purchase and install them in the home —are a product of the privatization of risk. While childproofing is constructed as a safety net for parents, the devices are deeply embedded within the market economy as commodities purchased by "knowledgeable" individual consumers. Safety devices appeal to the need to care for our children, to help them explore and survive in the world. By putting a price on "peace of mind" and cultivating it as part of parental responsibilities, safety devices materialize a previously intangible concept and make peace of mind "easily" attainable. Expectations of parents established within a rationality of supervision that emphasizes "entrepreneurial selves" and "intensive mothering" do not account for structural inequalities that limit and problematize the category of "free individuals" with the ability to choose how to selfmanage.

We are not arguing here that parents should not supervise their children or that childproofing is bad or unnecessary. Rather, we argue that safety devices—as they have been taken up by parents, childproofing businesses, and to some extent the research literature in child safety—co-produce beliefs that inflate agency in parents' ability to self-manage through good choices in order to achieve good, healthy children. This neglects the reality of disparate economic circumstances. It is precisely at this point that the trend toward increasing demands on mothers to purchase safety devices and provide greater attention through supervision become indicators of the "good parent" and collide with structural inequalities.

Nichter's (2003) and Lupton's (1999) approaches to analyzing constructions of risk and risk discourses reveal the insidious nature of childproofing.

Just as childproofing technology capitalizes on peace of mind, it also establishes moral value through the discourse of risk to ensure continued desire and use (Lupton 1999). These ideas of risk inform mothers' subjectivities as parents because the desire for peace of mind from injury intersects with the desire for control, and being seen and seeing themselves as "good parents." Risk discourse and the research on child safety devices contribute to a form of manipulation (Nichter 2003), governance, and disciplining technology that allows society to distinguish and account for good parenting.

At face value, safety products are neutral. However, our data reveal their deleterious effects on social relationships. The unequal distribution of safety products, and rental properties that are unsafe for tenants, is not random. When we move past the financial constraints inherent in this method of supervision, structural constraints are still deployed by landlords or other regulatory processes that prohibit their use. In recognizing the socially constructed appeal to parental intuition, we further our understanding of the symbolism entrenched in childproofing that individualize parents in favor of consumption, and ignore social relationships that could assist in the care of children. This individual approach to safety deflects from imagining creative ways to prevent injury that are more socially—rather than individually—beneficial (e.g. changes to housing policy, requirements for safety in infrastructure policy, promoting models of parenting that increase mothers' sense of competency without falling prey to individualism and intensive mothering, or increasing the provision of child-proofing more widely). In other words, employing strategies that do not privatize risk, but make child safety a public good.

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References

- Baker S and Haddon W 1974 Reducing Injuries and Their Results: The Scientific Approach. The Milbank Memorial Fund Quarterly. Health and Society 52(4):377–389. [PubMed: 4498200]
- Beck U 1992 Risk Society: Toward a New Modernity. Los Angeles, CA: Sage Publications.
- Bonilla-Escobar FJ and Gutiérrez MI 2014 Injuries are not accidents: Towards a culture of prevention. Colombia Médica 45(3):132–135. [PubMed: 25386040]
- Boo Boo Busters Professional Home Childproofing Services 2011 Baby Proofing 101 How to Create a Baby Safe Home Environment. Accessed from: https://booboobusters.com/safety-tips/
- Bristow J 2009 Standing up to Supernanny. Exeter, UK: Imprint Academic.
- Bryant A and Charmaz K, eds. 2010 The SAGE Handbook of Grounded Theory. Los Angeles, CA: Sage Publications.
- Calhoun C 2006 The privatization of risk. Public Culture 18(2):257–263.
- Centers for Disease Control and Prevention 2011 Major causes of hospitalization by age group, 2009 U.S. Department of health and human services, health resources and services administration,

maternal and child health bureau Child Health USA 2011. Rockville, Maryland: U.S. Department of Health and Human Services, 2011 Available at: https://mchb.hrsa.gov/chusa11/hstat/hsc/pages/211h.html

Centers for Disease Control and Prevention 2015 Leading causes of death and numbers of deaths, by age: United States, 1980 and 2014 National Center for Health Statistics (NCHS), National Vital Statistics System. National Center for Injury Prevention and Control. Available at: https://www.cdc.gov/nchs/data/hus/2015/020.pdf

Child Alert n.d Child safety in the home. Available at: Childalert.co.uk

- Cohen L and Swift S 1999 The spectrum of prevention: Developing a comprehensive approach to injury prevention. Injury Prevention 5(3):203–207. [PubMed: 10518268]
- Consumer Products Safety Commission (CPSC) 2005 Poison Prevention Packaging: A Guide for Healthcare Professionals. Washington DC: Consumer Products Safety Commission.
- Crnic KA, Greenberg MT, Ragozin AS, Robinson NM, and Basham RB 1983 Effects of stress and social support on mothers and premature and full-term infants. Child Development 54(1):209–217. [PubMed: 6831987]
- Damashek A and Kuhn J 2013 Toddlers' unintentional injuries: The role of maternal-reported paternal and maternal supervision. Journal of Pediatric Psychology 38(3):265–275. [PubMed: 23143608]
- Dershewitz RA and Christophersen ER 1984 Childhood household safety: An overview. American Journal of Diseases of Children 138(1):85–88. [PubMed: 6362398]
- Eleff LR and Trethewey A 2006 The enterprising parent: A critical examination of parenting, consumption and identity. Journal of the Association for Research on Mothering 8(1–2):242–251.
- Flores G, Tomany-Korman SC, and Olson L 2005 Does disadvantage start at home? Racial and ethnic disparities. Archives of Pediatric & Adolescent Medicine 159(2):158–165.
- Foucault M1991 Governmentality In The Foucault Effect: Studies in Governmentality. Burchell G, Gordon C, and Miller P, eds. Pp. 87–104. Chicago, IL: University of Chicago Press.
- Furedi F 2008 Paranoid Parenting: Why Ignoring the Experts May Be Best for Your Child. London: Continuum.
- Gaines J and Schwebel DC 2009 Recognition of home injury risks by novice parents of toddlers. Accident Analysis & Prevention 41(5):1070–1074. [PubMed: 19664447]
- Giddens A 1991 Modernity and Self-Identity: Self and Society in the Late Modern Age. Cambridge, UK: Polity Press.
- Gielen AC, Wilson MEH, Faden RR, Wissow L, and Harvilchuck JD 1995 In-home injury prevention practices for infants and toddlers: The role of parental beliefs, barriers, and housing. Health Education & Behavior 22(1):85–95.
- Greaves P, Glik DC, Kronenfeld JJ, and Jackson K 1994 Determinants of controllable in-home child safety hazards. Health Education Research: Theory and Practice 9(3):307–315.
- Haddon W, Jr 1980 Advances in the epidemiology of injuries as a basis for public policy. Public Health Reports 95(5):411–421. [PubMed: 7422807]
- Hapgood R, Kendrick D, and Marsh P 2000 How well do socio-demographic characteristics explain variation in childhood safety practices. Journal of Public Health Medicine 22(3):307–311. [PubMed: 11077902]
- Hays S 1998 The Cultural Contradictions of Motherhood. New Haven, CT: Yale University Press.
- Institute of Medicine and National Research Council (IOM) 1985 Injury in America: A Continuing Public Health Problem. Washington DC: The National Academies Press.
- Institute of Medicine and National Research Council (IOM) 1999 Reducing the Burden of Injury: Advancing Prevention and Treatment. Washington DC: The NationalAcademies Press.
- Kellogg C 1958 Child-proof decor. The New York Times, November 30 : SM96.
- Kendrick D, Coupland C, Mulvaney C, Simpson J, Smith SJ, Sutton A, Watson M 2007 Home safety education and provision of safety equipment for injury prevention. Cochrane Database of Systematic Reviews 24(1):CD005014 The Cochrane Collaboration and John Wiley and Sons, Ltd.
- Kendrick D, Coupland C, Mulvaney C, Simpson J, Smith SJ, and Sutton A 2013 Home safety education and provision of safety equipment for injury prevention (Review). Evidence BasedChild Health 8(3):761–939.

- Kerr K 2007 Prevention of injuries at home. Injury Prevention 13(2):141. [PubMed: 17446258]
- LeBlanc JC, Barry Pless I, King WJ, Bawden H, Bernard-Bonnin AC, Klassen T, and Tenenbein M 2006 Home safety measures and the risk of unintentional injury among young children: A multicentre case–Control study. Canadian Medical Association Journal 175(8):883–887. [PubMed: 16998079]
- Lee E, Macvarish J, and Bristow J 2010 Risk, health and parenting culture. Health, Risk & Society 12(4):293–300.
- Lupton D 1999 Risk. London: Routledge.
- Lyons RA, John A, Brophy S, Jones SJ, Johansen A, Kemp A, Johansen A 2006 Modification of the home environment for the reduction of injuries (Review). The Cochrane Collaboration 1:1–36.
- Matheny A 1986 Injury among toddlers: Contributions from child, mother and family. Journal of Pediatric Psychology 11(2):163–176. [PubMed: 3723280]
- McMullin J and Dao A 2014 Watching as an ordinary affect: Care and mother's preemption of injury in child supervision. Subjectivity 7(2):171–189. [PubMed: 25114724]
- Metzl JM and Kirkland A 2010 Against Health: How Health Became the New Morality. New York: New York University Press.
- Miller P and Rose N 1990 Governing economic life. Economy and Society 19(1):427–467.
- Moghisi A, Mohammadi R, and Svanstrom L 2014 Motorcyclists' safety in Iran: Implication of Haddon Matrix in safe community setting. Medical Journal of the Islamic Republic of Iran 28:37. [PubMed: 25250278]
- Morrongiello BA, Ondejko L, and Littlejohn A 2004 Understanding toddlers' in-home injuries: II. Examining parental strategies and their efficacy for managing child injury risk. Journal of Pediatric Psychology 29(6):433–446. [PubMed: 15277586]
- Morrongiello BA and Kiriakou S 2004 Mothers' home-safety practices for preventing six types of childhood injuries: What do they do, and why? Journal of Pediatric Psychology 29(4):285–297. [PubMed: 15148351]
- Morrongiello BA and Schell SL 2010 Child injury: The role of supervision in prevention. American Journal of Lifestyle Medicine 4(1):65–74.
- Mos L 2001 Chasing baby: Parents of toddlers find ways to keep them safe at home San Francisco Chronicle, 11 10.
- National Center for Injury Prevention and Control (NCIPC) 2002 CDC Injury Research Agenda. Atlanta, GA: Centers for Disease Control and Prevention.
- National Center for Injury Prevention and Control (NCIPC) 2013 Web based Injury Statistics Query and Reporting System (WISQARS). Accessed from: http://www.cdc.gov/ncipc/wisqars/.
- National Research Council (NRC) 1985 Injury in America: A Continuing Public Health Problem. Washington DC: National Academy Press.
- National Research Council (NRC) 1988 Injury Control: A Review of the Status and Progress of the Injury Control Program at the Centers forDisease Control. Washington DC: National Academy Press.
- Nichter M 2003 Harm reduction: A core concern for medical anthropology In Risk, Culture, and Health Inequality: Shifting Perceptions of Danger and Blame. Harthorn BH and Oaks L, eds. Pp. 13–33. Westport, CT: Praeger Publishers.
- Olsen LL, Bottorff JL, Raina P, and Frankish J 2015 Low-income mother's descriptions of children's injury-related events: A discourse analysis. Global Qualitative Nursing Research 2:1–12.
- Olsen LL, Oliffe JL, Brussoni M, and Creighton G 2015 Fathers' views on their financial situations, father–child activities, and preventing child injuries. American Journal of Men's Health 9(1):15–25.
- Pepis B 1950 Home: Where children play The New York Times, June 11:T169.
- Poison Prevention Packaging Act (PPPA) 1970 Public Law 91–601, 84 Stat.1670, 12 30,1970, Sec. 3; 15 U.S.C. 1472. Washington DC: Food and Drug Administration.
- Posner J, Hawkins LA, Garcia-Espana F, and Durbin DR 2004 A randomized clinical trial of a home safety intervention based in an emergency department setting. Pediatrics 113(6):1603–1608. [PubMed: 15173480]

Quinn N 2005 Universals of child rearing. Anthropological Theory 5(4):477-516.

Ramirez M 2004 How far is too far when child-proofing a home? The Seattle Times, 10 9.

Reif R 1957 Experts advise families to child-proof the home The New York Times, 12 17:F59

- Schwebel DC, Gilliland JM, and Moore JG 2009 Physical environment of the home and adolescent injury risk. International Emergency Nursing 17(1):47–51. [PubMed: 19135015]
- Singer M and Erickson PI 2009 Nothing to play around with In Killer Commodities: Public Health and the Corporate Production of Harm.Singer M and Baer H, eds. Pp. 67–94. Lanham, MD: Altamira Press.
- Sleet DA, Dahlberg LL, Basavaraju SV, Mercy JA, McGuire LC, and Greenspan A 2011 Injury prevention, violence prevention, and trauma care: Building the scientific base. Morbidity and Mortality Weekly Report 60(4):78–85.
- US Census Bureau 2010 American Community Survey for Riverside City, California Available at: http://quickfacts.census.gov/qfd/states/06/06065.html
- Van De Voorde P, Monsieurs KG, Perkins GD, and Castren M 2014 Looking over the wall: Using a Haddon matrix to guide public policy making on the problem of sudden cardiac arrest. Resuscitation 85(5):602–605. [PubMed: 24530250]
- Watson M, Kendrick D, Coupland C, Woods A, Futers D, and Robinson J 2005 Providing child safety equipment to prevent injuries: Randomized controlled trial. British Medical Journal 330:178–181. [PubMed: 15604156]
- Weisner TS and Gallimore R 1977 My brother's keeper: Child and sibling caretaking. Current Anthropology 18(2):169–190.