Consuming Digital Technologies and Enacting Identities: Mothers in Mundane Daily Life

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ABSTRACT

This manuscript examines mothers' consumption of digital technologies to enact their individual, relational, and familial identities. Using phemenological interviews it finds mothers purposefully consume digital technologies to negotiate, construct, and enact identities. Specifically, mothers use a repertoire of four appropriation strategies: mastering, partnering, domesticating, and avoiding. Mastery is a multi-year project in which mothers enroll in digital educational programs, qualify, and create new professional identities. In domestication, mothers assert themselves on technology managing their inclusion/exclusion in the time and spaces of family life, thereby enacting parental identities. In contrast, partnering is collaborative; mothers consume those functionalities of technologies that help them enact their identities. In the strategy of avoidance, mothers enact their identities of being fiscally responsible, by refusing to engage with budget busting technologies. The implications of these findings for marketing new Internet of Things technologies in the smart home are discussed.

INTRODUCTION

An emerging body of consumer research is bringing new theory and analysis to consumption by mothers (Carrigan & Szmigin, 2010; Stevens, Maclaran, & Catterall, 2007; The VOICE Group, 2010). Much of this research focuses on mother-centric products and services such as child-care resources (Huff & Cotte, 2013), maternity dresses (Ogle, Tyner, & Schofield-Tomschin, 2013), and prams (Thomsen & Sorensen, 2006), investigating mothers' consumption of these marketplace resources to negotiate, enact, and construct identities. Digital technologies are different: they are both personal possessions, sometimes very identified with the self (Belk, 2013), and networked technologies consumed to enact and negotiate social/relational identities. Some digital technologies are ubiquitous in the household and taken for granted utilitarian tools, others shift time and dislocate place becoming immersive, addictive, and paradoxical consumption experiences (Mick & Fournier, 1988). As such, digital technologies challenge and complicate constructions and enactments of the self (Belk, 2013), relationships between parents and children, and familial identities (Epp & Price, 2008). Since relational and family identities are key dimensions of their identities, mothers are a particularly relevant setting in which to observe the relationship between digital technology consumption and identity enactment. According to Cook (2013), "The key epistemological and conceptual insights enabled by attending to the specificity of mothers/motherhoods resides in recognizing that individual and individualistic consumption rarely applies, and that those who are charged with the care of young persons are constrained from acting solely in reference to an individualistic frame" (p. 76).

By looking beyond individual identity to parental and family identities, this manuscript contributes to identity research because relational identities are relatively neglected in the research on consumption and identities. Additionally, by looking beyond digital technologies as tools to how they are embedded in the identity enactments of mothers, this research contributes to research on the consumption of digital technologies. In doing so, it builds on recent research on mothers, identity, and consumption strategies that is reviewed in the next section.

Mothers, identity, and consumption strategies

Theories used to frame mothers' consumption for identity enactment include liminality (Ogle et al., 2013), vulnerability (The VOICE Group, 2010), constrained choice outcomes (Huff & Cotte, 2013), and experiential consumption (Stevens et al., 2007). Framing mothers-to-be as liminal consumers and focusing on maternity dress consumption, Ogle et al. (2013) identify two consumption strategies. Consumption as disruption in the "Woman I am Most of the Time," and consumption to maintain continuity in the "Woman I Am Most of the Time." In this way they find that during periods of transition, women enact consumption strategies to both maintain current identities and build new impending identities.

Framing mothers, particularly new mothers, as vulnerable reveals the consumption strategy of coping (Huff & Cotte, 2013). New mothers are caught in rupture between the ideologies of the good mother – created and perpetuated by marketing, advertising and the media – and the lived reality of feeling inadequate and out of control (The VOICE Group, 2010). They use consumption as coping strategies or cognitive, emotional, and/or behavioral responses to a stressful situation that help alleviate feelings of stress and anxiety. In addition to coping, mothers also use a strategy of adaptation (Huff & Cotte, 2013). Faced with a "constrained choice" situation of having to chose among a restricted set of choices none of which is perfect, mothers adapt when they embrace the consumption outcome and frame consumption as if they made a choice thereby enhancing their subjective well-being. This adaptation is a psychological and cognitive process and different from coping by being linked to resilience and well-being. Using the lens of experiential /sacred consumption, Stevens et al. (2007) found that women appropriate technology – deliberately and purposefully consuming women's magazines – as "vehicles to facilitate and legitimize a focus on the self and time out from the family and their needs and wants" (p. 236). Women's appropriation of women's magazines reveals both temporal and spatial order. Women achieve temporal order through careful pre-planning and scheduling of consumption to carve out their down time. Spatial order manifests in the physical places –bath, sofa, even toilet, where women choose to consume the magazines. Women designate consumption times and places as special and consumption takes on aspects of a sacred ritual.

In summary, this review reveals how and why mothers' consumption strategies are contingent on the nature of products they consume. For maternity dresses, a product consumed during the transitional stage of pregnancy, consumption strategies relate to identities before and after pregnancy. Child-care consumption is fraught with anxiety and mothers cope and adapt. Magazines are experiential products that women appropriate to escape. Shifting focus to digital technologies, this paper explores the impact of the functionalities of digital technologies on mothers' consumption for enacting identities. Before presenting the findings in detail, the next section lays out the methodology for this research including sampling logic, procedures and instructions, analytic methods employed, and informant profiles.

METHOD

Research site

The research is situated among the families of enlisted army men living on two U.S. Army posts. The army post is an ideal site for studying the relationship between mother's identities and consumption because gender, family, and parental identities are frequently challenged and hence made salient here (Reed II, Forehand, Puntoni, & Warlop, 2012). The authoritarian, masculine culture on posts challenges feminine identity. Family identity is also challenged by relocations – when families are transferred every few years, and dislocation – when spouses are deployed to war for long and multiple tours of duty (Alvarez & Sontag, 2008). Additionally, parental identity is challenged for mothers when spouses deploy and return, as mothers make the transition from essentially being single parents to co-parenting.

Sampling

A two-step stratified random sampling method was used to select 18 informants from panels of enlisted men's families. First, digital technology ownership (low, medium, high) was recorded for panel families since technology consumption is correlated with ownership (Shih & Venkatesh, 2004). Next, a random sample of mothers in each ownership level was invited for interviews on technology consumption. At this stage, one-to-one phenomenological interviews, in which primacy is placed on the subjective experience of the interviewee, were conducted (Thompson, Locander, & Pollio, 1990). Interviews were supplemented with home visits with 14 informants. This added context and depth to interview data by documenting the placement of technologies in the home, taking pictures, continuing discussion of technology consumption, and gaining contextual understanding of mothers' lives.

Procedures and Instructions

One week before the interviews, informants were asked to identify six to eight different images that capture their thoughts and feeling about technology in the home. These are not literal but metaphorical images of products, and informants were given examples to clarify the difference. During the interviews, these images were used as probes to autodrive informants facilitating deep dives into the meanings of the technologies in their lives; prodding informants to go below conscious, surface level observations and connect to deeper subconscious feelings (Zaltman, 2003). The photo-elicited interviews ranged from 45 minutes to two hours (average 1.5 hours). They were conducted at a community center on post to avoid distractions and taped with permission. Home visits followed and on average were half an hour long. Informants were compensated for childcare expenses incurred during research participation.

The interviews were transcribed verbatim and the transcripts, which ranged from 10-36 single spaced pages, were analyzed using the phenomenological method (Thompson et al., 1990) of working back and forth iteratively between the data, the emerging consumption strategies, and the literature. First, each informant's transcript was read very closely to identify chunks of data capturing technology consumption strategies, identity enactments, and contextual information such as individual and family priorities and resources. For each informant summary profiles with descriptive statistics (demographic, technology ownership); identity projects (parent, army wife, family); key findings (technology consumption strategies) and quotes were constructed. Tables were built to summarize patterns of findings on digital technology consumption and identity

enactment across informants. This data analysis and interpretation was systematized using NViVo. In the manuscript, findings are presented as patterns of digital technology consumption for identity enactments (family, parent) across informants. Findings are also presented using informants as exemplars when the case is unique, as in the case of Laqueta and the enactment of her religious identity, or where the focus on an exemplar adds to a richer understanding of the research question (Ahuvia, 2005).

Informant profiles

Digital information and entertainment technologies such as the Internet and videogames dominated informants' narratives, although a wide range of technologies were mentioned. In terms of their technology ownership, the sample skewed to the medium/high range. On average informants owned 1.5 desktop computers, 3 televisions (range 1-5), 3 VCR/DVD players (range 1-5). Nine families owned laptops and more than half had cable.

A detailed demographic and technology consumption profile is included in Table 1. Informant names are pseudonyms to mask their identities. It should be noted that Military Household income is not directly comparable to U.S. households because some types of military earnings e.g. housing/medical benefits are provided in value (Hosek, Asch, Fair, Martin, & Mattock, 2004; Perdew, 2007). Nonetheless, there are gaps in financial well-being between military and civilian families attributable in part to career disruptions for military wives from frequent relocations (Fromm, 2013).

FINDINGS

Digital technology hardware (TVs, computers) and software (the Internet, games) are embedded in the identity enactments of mothers. Some identities (religious identity) are relatively stable, others are in the process of being constructed (geek). Identities are individual (army wife), relational (authoritarian parent), and familial (togetherness). Mothers are active and assertive in their consumption of digital technologies for these identity enactments; they cast digital technologies as transformational (construct new identities), as partners (makes me a better parent), in roles of key religious figures (muezzin), as evocative objects for contemplating identity (what kind of family is this?), and as sites for negotiating between identities (individual/family). Specifically, four identity enactment strategies are identified: mastering, partnering, domesticating, and avoiding. The findings are organized in four sub-sections, each focusing on one consumption strategy.

Mastering digital technologies to create individual identity

> I love being that computer geek and I have found my geekiness after starting this program and I just love it. I love being a computer wiz now so it's and you know that's not a safe place for me to be. But this is really exciting…It's a breakthrough… five years ago I was totally computer illiterate, afraid to turn on the computer.

This quote from Sofia captures the consumption strategy of mastering. In the last five years she has transformed herself from computer illiterate to an expert or self-confessed "geek."

Table 1
Informant Demographic and Technology Consumption Profile

Informant	Age	Education	Employment	# Kids	Income ('000)	Race	Tech Ownership	Consumption Strategy
Sofia	33	Assoc. degree	Student and Part Time	1	$30-49.9	White	High	Mastery
Brianna	38	Assoc. degree	No, but looking	3	$50-74.5	African American	Medium	Seeking mastery
Jackie	29	Some college	Student	3	$30-49.9	White	High	Mastery
Laqueta	33	College degree	No	4	$50-74.5	African American	High	Partnering for family identity
Hailey	27	High school	No	2	$30-49.9	White	High	Partnering for individual identity
Dakota	36	High school	No	3	$30-49.9	White	Medium	Partnering for parental identity
Michelle	27	Some college	Full-time	3	$50-74.5	African American	High	Domestication
Katelyn	34	College degree	Full-time	2	$30-49.9	White	Medium	Domestication
Dalia	29	Some college	No	2	$30-49.9	White	Medium	Tool
Claire	39	Some college	No	4	$75-99.9	White	High	Tool
Sadie	35	High school	No	3	$30-49.9	White	High	Tool
Stephanie	40	College degree	No	2	$30-49.9	White	High	Domestication
Julia	42	College degree	Part-time	3	$50-74.9	White	Medium	Tool
Savannah	34	Some college	Student	4	$50-74.9	White	Medium	Tool
Alyssa	24	High school	No	2	<$30,000	White	Low	Avoidance
Kimberly	44	Some college	No	2	$30-49.9	White	Low	Domestication
Jessica	26	Some college	Student, looking	2	$30-49.9	White	Medium	Tool
Vanessa	29	Some college	No	2	$50-74.9	White	Low	Avoidance

The resource for this mastery is an Associates Degree in Computer Aided Drafting; "*I'm learning drafting and everything from architecture to typographic survey.*" Sofia's mastery (Mick & Fournier, 1998) of digital technology is an accomplishment she considers "*exciting*" and likens to a *"breakthrough."* Her use of the word "*breakthrough*" is noteworthy because she uses it to describe both technology and herself; in this way technology becomes a metaphor for her life. For Sofia, the breakthrough is overcoming feelings of not being in a "*safe place*" with digital technology to a place where she is in control. Gaining mastery of technology, a thing she was "*afraid*" of, makes Sofia feel competent and fuels her self-worth. Furthermore, her rewards go beyond the gains in self efficacy from computer expertise well established in the literature (Kulviwat, Bruner II, & Neelankavil, 2014). Sofia's rewards are fundamental to her identity; she creates an identity she loves – "*I love being that computer geek.*" Another reward of mastery is the confirmation of this new identity in the eyes of her husband and boss, the other people (and men) she is connected to as wife and student-worker. She says "*There are some things that I can do that my husband can't even do*" and "*I've become invaluable to my boss.*" As such her mastery is rewarding not only because she has created a new effective and accomplished identity, but also because it is affirmed by being indispensable to the people who are important to her.

In addition to the rewards to herself, Sofia's mastery of computer education is motivated by rewards for her husband and her family. Sofia's household income is $30,000-$49,000 and her family is financially strained. She budgets (prioritizing money for her classes), watches every penny (using free Internet for long distance calls, watching movies at home instead of going to a theatre), saves for retirement, and sets money aside for fun non-essentials such as a digital video recorder. By becoming a computer geek and getting a professional job in her area of expertise, Sofia hopes she will no longer need to scrimp and save. Her husband will not longer have the burden of being the sole breadwinner and her family will finally be able to afford the life style to which they aspire. In this way, Sofia's new identity enactment is driven by her caring orientation (Thompson, 1996) which is a gendered way of life driven by "feelings of responsibility for enhancing the well-being of others…" (p. 401).

Sofia's case also sheds light on the costs to mothers of using mastery as a strategy for identity creation. Pursuing mastery has been taxing for Sofia who works part-time during the day, takes classes at night, single-handedly manages the domestic front, and has responsibility for her four year-old son and her husband. She is married to a "*First Sergeant in charge of a hundred soldiers*" whose job is very important to her, and she does everything possible to make his home life easy including pressing his uniform. Her daily life epitomizes the day-to-day lived reality of mothers who are holding-it-together (Carrigan & Szmigin, 2010; Thompson, 1996). She works very long hours, juggles competing responsibilities, is pressed for time, tries hard to stay on task, and is barely managing to stay on schedule. As she puts it, *"life is a circus – it is complicated, stressed and can go off track at any moment."*

Partnering with digital technology

Partnering is a second digital technology consumption strategy used by mothers. Here, as in mastery, mothers are intentional and purposeful in their consumption. Unlike mastery, mothers do not assert themselves on technology; partnering is more collaborative in enactment. Mothers

use technologies unique capabilities (information at your fingertips, social connectivity) as resources to enact their identity. By appropriating the enabling and enhancing functionalities of technology (escape, search, and shopping) they make technologies support their identity enactments. In partnering, mothers are in their zone of effective action with technology; they know what technologies to choose, and how to bend them for their own purposes in the service of their individual and family identities.

Mothers' partnering with digital technologies is illustrated by Hailey who deliberately consumes different digital technologies to help her enact facets of her identity as an army wife including supporting her husband and connecting with her community of friends on post. The army wife is a dominant gendered identity on post, idealized in a poem as having the strength of a lion, being completely independent, possessing the qualities of both father and mother, being a perfect hostess to four or forty at an hour's notice, handling every emergency imaginable without a manual, carrying on cheerfully even if she's pregnant and has the flu, and willingly moving 10 times in 17 years! Hailey strongly identifies as an army wife; for her "*being a military wife in a military family is a gift from God.*" Despite this, she is very forthcoming about the pressures of army life for army wives. She says army wives are "*stressed out*" because they marry young, lack education, have to move where and when Uncle Sam tells them, and deal with the months-long absences of deployed spouses. To manage these stresses, Hailey says a military wife has to be like a "*military person*" on the home front: take charge of family, household, and community of friends and neighbors on post.

To enact her identity as an action-oriented army wife, Hailey collaborates with multiple different digital technologies including the computer, email, and instant messaging. She relies on the computer to help her husband make it through his breakdowns. When her husband is having a bad day she "*summons*" him to the computer "*because I know that he can get lost at the computer…when Daddy's on the computer, he's in a bubble. Nobody messes with him.*" Her partnership with the computer is crucial because she cannot help her husband on her own but knows that she rely on the computer to help out; all she needs to do is get her husband in his bubble playing computer games. Hailey also partners with digital technologies to enact other facets of her army wife identity such as being supportive of her army "*family:*"

> I feel like family should be get-togethers and communication and big parties…It (technology) makes it a lot easier because if I don't have time to chat with my girlfriends, I can send them a ten minute e-mail, or they can IM me for two seconds, and I feel like I can butt them off the computer a lot quicker than I can hang up the telephone.

Here, Hailey is partnering with communication technologies to maintain her network of friends and relationships on post by selectively and deliberately using the unique functionalities of each different digital communication technologies. When time is short, she uses Instant Messaging (IM) to connect quickly. When she has more time but does not want to get snared in a phone conversation – which is difficult to end politely – she writes emails. Both IM and email are asynchronous and give her control in enacting her identity as a caring army wife and neighbor than making a phone call. By deliberately using these technologies, she avoids threatening her identity as an army wife by "*butting*" people off the phone.

Laqueta's case illustrates partnering with digital technologies to enact her family's religious identity. Her family is most important to her and "number two is that we have a place where we can go and worship and remain a family unit." Family and religion are intertwined with her Muslim identity defining her family's place in a community in which they are in a minority, both racially (African-American) and by faith.

> A far as technology, if we need a place to worship … we can get on the computer…we can do searches like for prayer time. Like we have this program on the computer and when it is time for prayer it comes on the computer every five times a day that it is time to pray, so that is another way that technology connects us to our faith.

Praying five times a day is a fundamental precept of the Islamic faith and in Muslim communities the muezzin's call for prayer is an inexorable part of daily life (Armstrong, 2002). With no muezzin on post, Laqueta installs software on her computer to signal prayer times. She uses her computer expertise to cast the computer in the role of a very important religious entity – the muezzin. In this way Laqueta partners with digital technology artifacts (hardware and software) to maintain her family's religious identity.

> I do use it to find like Muslim clothing and Muslim food because the majority of the food that we like to eat is (*describes Halal practices*) so what I do is search on the Internet and compare prices and see what place has the most reasonable price. So I use it that way.

In addition to the core beliefs, values, and principles that constitute the Islamic faith and are written in the religious texts, being a Muslim is codified in prohibitions and prescriptions around consumption practices (Esposito, 2002). For Laqueta, living a life of faith means locating and procuring Halal meat that adheres to the strict prescriptions of her religion and since this is not possible on post, she searches the Internet for suppliers. Here, again she partners with digital technology, appropriating its unique search capabilities to connect to her faith and enact her religious identity.

Domesticating digital technology

Prompted by the introduction of information and communication technologies in the household in the early eighties, domestication theory is an attempt to understand socio-technical change from the perspective of the household (Silverstone, 2006). Domestication is the process by which households appropriate technology; bending it to their purposes thereby making technology meaningful to them (Morley 2006; Silverstone 2006). This section uses the frame of domestication to analyze mothers' consumption of digital technologies to enact their collective/relational identities of parent and family.

> …we had a TV in the living room, the kids had one in their room, and my husband and I had a TV in our room…my husband would come straight home and

put on the WWF wrestling and I can't stand it. … the kids would be in their room with their cartoons and he'd be watching wrestling, so I'd go to my room … And I thought about it and I said, **what kind of family is this everybody is doing their own thing in separate rooms**.

To Kimberly, digital technology becomes an evocative object (Turkle, 2005) as her family's television viewing habits break through mundane domestic life and prompt her to reflect on her family's identity. Kimberly has two children, girl (14) and boy (12). As she sees it, when her husband and children are home, their interests in different TV programs (cartoons, wrestling), pursued in different rooms in the house, separate them. This is not the kind of family she wants them to be. By inference, her family identity goal (Epp & Price, 2008) is togetherness. She wants her family to engage with each other in a shared consumption activity, but the televisions are impediments to this goal. At first, Kimberly's response was to take off to another room and read (rejecting technology). Later, she forbade her family from watching TV and in effective removed the disruptive technology from the family. In this way Kimberly engages in the domestication strategy of incorporation which is the intentional injection of technology in the temporal routines and rhythms of family life (Silverstone, 2006).

Mothers also engage in the domestication strategy of objectification in which they deliberately and strategically place and displace technology in the physical spaces of their homes to align technology consumption with family identity goals (Silverstone, 2006). Katelyn (Two sons (10 & 5)) is frustrated by the amount of time her husband spends playing games and to deal with this conflict she objectifies technology. She has set aside a room in the home as a family game room, and banned digital technologies from it. When this researcher visited their home the game room was strewn with old-fashioned board games. There was one computer in the room but it appeared to be broken and was sitting abandoned in the corner. Just as in Kimberly's case, family identity for Katelyn is a collective enterprise that is pursued through family togetherness and engagement in shared family activities. She casts digital technologies as disruptors of family identity because technologies isolate family members and impede family togetherness, causing tension and conflict.

In addition to domesticating digital technologies by removing them from family times and spaces, mothers paradoxically also domesticate these technologies by inserting them into family times and spaces. Mothers consume movies as vehicles for enacting family identity. Sadie's children, (Two daughters (12 & 7) and a son (3)), pick a movie (nine out of ten times, a Disney movie), and they all pile on the couch, shut everything else out, and watch it together. Jackie echoes this:

> Usually like sometimes Friday and Saturday nights we'll do with all of us because he went out and got the kids the latest Harry Potter and we all sit in here and watch it… So yeah that's our big, that really is a big thing for us watching a movie on the weekends because we can all sit around and laugh …

For Jackie and her family (One daughter (12), two sons (9 and 3)) sitting together on the weekends and watching a movie has all the elements of a family ritual – repeated patterns of

behavior that reinforce the priority of spending time together, create shared family memories, and become family traditions (Epp & Price, 2008). This family ritual is centered on digital technology (movie) and enacted through incorporation of this technology, bringing it into their family life on weekends. This consumption strategy parallels Katelyn's construction of the ritual of the family game night, the difference is Katelyn domesticates digital technology by removing it from the family ritual, whereas Jackie's domesticates digital technology by including it in the family ritual.

In addition to domesticating digital technologies for enacting family identity, mothers also domesticate digital technologies for enacting parental identity.

> The computer is in the living room where we are. We don't allow them to have a computer in their room … So we keep a pretty close eye on it. It's not hard. You look over and see what they're doing every so often and it's no big deal. And they know not to go to – I don't think they have any desire to go to those kinds of bad kinds of places.

For Stephanie (daughter (12) & son (8)) digital technology allows the intrusion of the realm of the far, a strange and troubling place, into the realm of the near – her home (Morley, 2006). It is her job as parent to keep her children safe: "*Home is where my job is. That's where I work, I work at home. Cleaning and cooking and taking care of the kids and carting them around.*" To do her job and keep her children away from those "*bad kinds*" of places, she objectifies computers locating them in the living room where she and her husband are. By inference, this centrally located place in the home where she can easily monitor her children, becomes a "good" kind of place. Stephanie is an authoritarian parent (Gotze, Prange, & Uhrovska, 2007), who uses her positional power to control her children. She allows her children one hour of video games a day. If they want more gaming time, they have to read or do a craft first. Her rule is half as much time for video games, as they spent reading. She uses timers to monitor consumption and rewards compliance and punishes transgressions. In this way Stephanie's domestication of technology is linked to her enactment of her role as a parent. Her understanding of her role as an authoritarian parent shapes her practices of objectifying and incorporating technology and these practices in turn help her be a responsible parent.

Avoiding technology consumption

> But money just kind of holds us back because technology is not a cheap thing. Technology is expensive. If you want to keep up with technology, you better have some money to back it up with. That's why it's the celebrities and the rich folks that have all the cool stuff. We don't have it.

This quote from Alyssa (Household income < $30,000) reveals that in addition to the strategies for consumption, mothers avoid digital technology consumption by refusing to buy digital technologies and deferring technology upgrades. This avoidance encompasses intentional anti-consumption behaviors at the micro-level; the decision not to consume specific digital technology products, as opposed to a deeply held ideology based resistance to technology (Cherrier, Black, & Lee, 2011). Unlike avoidance behavior identified by Mick and Fournier

(1998) as a reaction to the anxieties and uncertainties of technology consumption, in this study the mothers who avoid digital technology – Alyssa and Vanessa – are not anxious about digital technology consumption. To the contrary, they are knowledgeable and competent with this technology. As Vanessa put it, technology is so integrated in her life that she cannot separate the two, "*I've grown up with it so it's like it's always been there.*"

Nonetheless, Vanessa and Alyssa refuse to spend money on technologies because they cannot afford these technologies. Both these mothers are the responsible ones in the family and they have taken on the task of getting their families out of and staying out of debt. Their refusal to buy digital technologies is a deliberate choice to be fiscally responsible by controlling household expenses. Vanessa's family has stopped using credit cards. Alyssa notes that not only is technology expensive but it also becomes obsolete so quickly that is hard to keep up and afford the new technology.

DISCUSSION AND IMPLICATIONS

This manuscript contributes to research on mothers' consumption strategies for identity enactment by revealing how and why mothers appropriate digital technologies for constructing and negotiating identity. In doing so, this research expands our understanding of mothers' consumption strategies from coping and adapting to deliberate and purposeful appropriation. The appropriation strategies of mastery, partnering, domestication, and avoidance vary in the level and nature of mothers' engagement and commitment to digital technologies. In mastery, mothers make a multi-year commitment to create new identities and consequently are deeply engaged in their consumption of technologies. They manage multiple and competing commitments, work long hours over a number of years to gain technology expertise. The opposite is the case for the strategy of avoidance. Here mothers gain control of their lives and enact their identities of being the responsible one, by refusing to engage with technologies. In domestication, mothers take control of technologies consuming them to enact identities by managing digital technologies inclusion/exclusion in the time and spaces of parental and familial life. While partnering is collaborative, mothers consume those functionalities of technologies that help them enact their identities.

Perhaps because digital technologies are embedded as tools in the chores, tasks, and projects that constitute mothers' daily lives, their role in the enactment of mothers' identities has been neglected. Indeed, without the frame of consumption for identity enactment, mothers' consumption of digital technologies can be misread as pursuing functional, utilitarian goals. Mastery of digital education, for example, could be read as seeking financial stability as a goal in itself, if it not understood as creating a new identity (geek). Shopping on the Internet could be interpreted as price shopping, if it is not read in the context of faith appropriate shopping to enact a religious identity. Furthermore, avoiding could be understood as a coping strategy, instead of mothers taking control by refusing to buy. By framing digital technology consumption as identity enactment and uncovering the deliberate, purposeful nature of the engagement of mothers with technology, this manuscript expands our understanding of mothers' consumption of technology. In addition to consuming technologies as tools, they can also appropriate technologies for identity enactments.

The appropriation strategies of mastering, partnering, domesticating, and avoiding identified in

this research, are intricately intertwined with the capabilities and functionalities of digital technologies. The strategy of mastery, to create new identities such as geek, emerges in the consumption of digital technology education which is an epistemic consumption object or a continuous knowledge project (Zwick & Dholakia, 2006). The only way for mothers to effectively appropriate digital technology education is to become an expert or master it. Additionally, mothers capitalize on the search and shopping capabilities of the Internet partnering with it to enact family identity (religion). They also consume the connectivity features (asynchronous, speed) of technologies such as IM, partnering with them to enact individual identity. Furthermore, they objectify and incorporate the addictive and immersive media rich features of movies and videogames, controlling them both by folding them into family togetherness rituals, and paradoxically by excluding them from these rituals. Finally, recognizing that digital technologies are expensive and have short life spans, and needing to put their financial affairs in order, mothers avoid digital technology. In this way the appropriation strategies mothers use is contingent on the functionalities and capabilities of the digital technology.

Additionally, the appropriation strategies mothers use is agnostic to their goals; the same strategy can be used to accomplish diametrically different identity goals. This finding is revealed across consumption strategies (partnering, domestication) and identities (personal, parental, familial). The consumption strategy of partnering, for example, is used to enact both minority and majority identities. Hailey partners with digital technologies to enact her identity as an army wife, which is a mythic yet prevalent identity ideology on an army post. Laqueta, on the other hand, partners with the very same technologies to enact her minority religious Muslim identity. In the case of the domestication strategy, mothers use it to enact both an authoritarian and authoritative parent identity (Gotze et al., 2007). Stephanie uses the domestication strategies of objectification (placing computers in the living room where she can keep an eye on her children's consumption) and incorporation (allowing and not allowing technology use) to enact her identity as an authoritarian parent. In contrast, Jackie, who is an authoritative (Clark, 2009) – warm, boundary setting – parent, uses the same strategies of incorporation to enact family rituals centered on watching movies together on the weekends.

Finally, the appropriation strategies themselves are not gendered, but their enactment can be understood in the context of the gendered lives of women (Cockburn & Ormrod, 1993; Rodino-Colocino, 2006). The strategy of mastering, for example, is gender neutral; men (Mick & Fournier, 1998) and children (Turkle, 2005) enact this strategy as well. However, the purposes, rewards, and costs for women enacting the consumption strategy of mastery are different. Young children display the engagement strategy of mastery for personal rewards (Turkle, 2005). Mothers do too, but they are also driven by their caring orientation (Thompson, 1996) to seek rewards for their family. Sofia's engagement with mastery is driven to create a "*person I love*" and out of caring for her husband (he will not be the only bread winner) and her family (affording the life they aspire to). As such, driven by caring mothers align their individual and relational identity goals in enacting the strategy of mastery. Further, the costs to mothers of engaging in mastery extend beyond the monetary, time, and learning costs typically associated with mastering technology. When Sofia enrolls for classes she adds this project to her already full schedule of responsibilities for her spouse, child, and domestic affairs. Her daily life is a carefully orchestrated circus; she works long days, manages competing demands on her time, and tries hard to stay on track. In this way, the rewards and costs of mastering digital technology

for mothers can only be understood by recognizing the gendered nature of her identity enactments.

Managerial Implications

Despite the promise of the smart home where appliances and devices in the Internet of Things (IoT) can be networked at price points that appeal to mainstream markets, IoT innovations are struggling to broaden their appeal beyond early adopter segments (Higginbotham, 2015; Hoffman & Novak, 2015). According to Hoffman and Novak (2015) there is a disconnect between IoT marketers and potential consumers because a smart home is not something consumers buy, it is something they create. The research in this paper contributes to this line of thinking by emphasizing and highlighting the role of the mother in creating the smart home. It makes a strong case that marketers of IoT need to shift their sights from gadget loving men, who are traditional early adopter segments, to mothers. Additionally, marketing aimed at mothers must go beyond simplistic feminine/masculine gendering (pink laptops, zero coke) (Avery, 2012), IoT technologies design should be based on the IoT's role in constructing and enacting mothers' identities. Mothers will create the smart home by deliberately and purposefully appropriating these technologies to enact their personal, parental, and familial identities.

Designing and marketing IoT technologies for appropriation by mothers needs to recognize how the priorities and projects of mothers' lives are different from men's. Take the strategy of mastery. Both men and women pay the costs and seek the rewards from mastery. But, the costs for mothers are rooted in their time pressed, schedule driven daily lives juggling responsibilities of multiple different fronts, and their rewards are evaluated not only for themselves but also for their families. Setting up the IoT in the home is demanding because interconnecting these devices is not yet simply plug and play (Hoffman & Novak, 2015). Making the IoT devices work in concert with one another and tailoring them to consumers' priorities requires considerable investment of time and energy. For mothers this is a particular challenge. Till IoT marketers mitigate this challenge and solve their interoperability problem, their appeal to mothers will be limited.

This research also reveals that mothers will create the smart home by partnering with the IoT technologies. The strategy of partnership recognizes that mothers are in charge; they are in the zone of effective action. Consequently, the IoT technologies should be positioned as accomplices, helpers, or assistants to mothers in enacting their identities. Take for example mothers use of communication technologies to maintain their relationships with friends and neighbors. Depending upon who they are talking to, how much time they have, and not wanting to hurt feelings, mothers will use synchronous or asynchronous communication technologies, long and short formats, voice, text, or video. To be of assistance to mothers consequently, IoT technologies need to offer mothers a range of functionalities so that mothers can pick and choose those that suit their purposes.

Additionally, this research shows how mothers will domesticate IoT technologies to enact their identities and in this way create the smart home. It suggests that IoT marketers seeking to appeal to mothers need to demonstrate that mothers will be able to domesticate IoT technologies in order to create their family and parental identities. Technologies will have to be designed both or inclusion and exclusion by mothers in the time and spaces of the home. Strategies of inclusion

for IoTs will need to recognize that one of a mother's identity projects is to create family togetherness and IoT capabilities that facilitate togetherness will appeal to mothers. Similarly, IoT marketers will need to design features into the technologies that give mothers the capabilities of excluding IoT functionalities that obstruct togetherness.

Finally, this research reveals that mothers are very creative and original in how they bend technology to their identity projects. They can cast technologies in the roles of a partner in constructing a religious identity, a distraction for a spouse who is having a melt-down, and a space for family rituals. It will be well-nigh impossible for IoT marketers to catalog these identity projects and purposes, leave alone design technologies with them in mind. IoT marketers will have to offer a menu of functionalities and capabilities to mothers and let them create their very own smart home. But, simultaneously marketers need to be mindful of not overwhelming the mother with too many options. Finding this happy medium will be another challenge for the marketer.

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