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Innovative and Introverted: How Introverts Function in the Creative Workplace

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Thesis Summary

Open office plans have become the dominant style for creative workplaces, designed to encourage constant collaboration and proximity. Little research assesses the validity of that conventional practice, or the impact of open environments on creativity, productivity or employee satisfaction for introverts, who require time alone for highest functioning. Though the "Extrovert Ideal" permeates these industries, nearly 50% of the general population is introverted—and introverted traits correlate positively with creativity. This thesis includes a survey of 143 people working in creative industries, assessing perceptions of productivity and satisfaction along with personality type. A majority of respondents yearned for solitude to complete certain tasks. Findings suggest that open office environments may indeed undermine creative productivity, especially among introverts, and in turn, discriminate against non-extroverts. The study points to a need for broader inclusiveness of cognitive diversity in the creative industries, especially in light of "tokenism" and other marginalizing phenomena. Accommodating introverts may bring about a greater degree of career success for people on either side of the extroversion spectrum.

INTRODUCTION

I am an introvert. The day that I discovered what constitutes the introvert's mind, I was sure that I fit into that category. Traits and mannerisms fit—introspective, reserved, observant, deliberate. It was not until I entered the corporate world that I noticed how my traits would affect my affinity for certain workspaces and environments. A summer job in a bank's creative services department adhered to my needs: friendly yet focused staff, separated by organized cubicles. My next job, abroad in Israel, posed a bigger threat to my need for solitude. In lieu of an office, I worked at a long table in an open social area; full-time staff, however, had access to private cubicles and a designated "quiet zone." I saw a light at the end of the tunnel for introverts like myself in fast-paced, demanding corporate environments—if I could only figure out how to get there.

"I am an introvert." As psychological research and theory finds, this phrase is not a rarity. Introverts are extremely self-aware, and are naturally prone to be more self-conscious (Fenigstein, Scheier, & Buss, 1975; Fletcher & Baldry, 2000). But even self-awareness of introversion does little to drive away its "symptoms" which often plague introverts in the workplace. With the proliferation of loud, colorful work areas from the world's most innovative companies all the way down to startups, the creative personality type that favors quiet solitude for productive workdays faces obstacles that others may not.

Literature paints a troubling picture for introverts at work. While publications have begun referring to inclusiveness of personality as "diversity" in recent years, a lack of awareness of this kind of diversity continues to stall inclusive progress (Ekblad, 2013). The result is a workplace in which the primary challenge facing intuitive introverts is integration, as many do not feel comfortable expressing thoughts or feelings in a traditional work setting. Continual frustration

stemming from expecting disapproval is thus a real possibility (Nadel, 2008). With the shift in the creative industries leaning toward collaboration and proximity, which can stall creativity for all personality types, a mismatch between psychological research and creative workplace practices is extant.

Introverted traits often coincide with creativity, and can add value to an organization (Dannar, 2016). Thus, professionals in the creative industries who consider the needs of diverse and hardwired personalities may create a more stable culture of innovation and acceptance. The creative industries consist of: advertising or marketing; architecture; design (fashion, product, graphic, etc.); film, TV, radio, photography or video; computer services, IT or software; consulting; freelance or independent contractor; museum, gallery or library; music, performing or visual arts; publishing; and research and development (DCMS, 2016).

The purpose of this thesis is to encourage equal awareness of diversity of personality as with conventional examples of diversity, such as gender or racial; and to push the creative industries further toward the flexibility of my internship that incorporated varied types of workspaces including a quiet zone, private work rooms, and a work from home option. This can bring the industries closer to matching psychological research and creating increased productivity, satisfaction and inclusion. The insights presented here, if acted upon, have the potential to serve benefits to employers, as well as professionals anywhere on the extroversion scale.

LITERATURE REVIEW

Introversion: A Psychological Overview

Nearly one-half of the general population are introverts (CAPT, 2003). The concept of introversion was popularized by Carl Jung in the 1920s, who asserted that introversion is characterized by turning inward rather than outward, with interest toward external objects withdrawing back into the "subject", who is of primary importance. According to Jung, it may be intellectual or emotional, characterized by either sensation or intuition (Jung, 1976). His contemporary Freyd offered a more concrete definition, writing an introvert is "an individual in whom exists an exaggeration of the thought processes in relation to directly observable social behavior, with an accompanying tendency to withdraw from social contacts" (Freyd, 1924).

Traits associated with introversion include analytical, reserved, deliberative, cautious, self-conscious, introspective, anxious, reticent, and conscientious. Freyd also describes behavioral tendencies that overlap with introverted traits. Many have difficulty with public speaking, prefer completing tasks alone and are prone to sensitivity when it comes to personal remarks (Freyd, 1924). In addition, introverts can be easily embarrassed, prefer few friends over many and has difficulty in decision-making due to risk aversion. Most are motivated by praise, rely on rationalization rather than impulse, and are competitive—especially in intellectual and creative work (Allport & Allport, 1921).

Today, research understands that the brains of introverts process information uniquely. As a group, they remain highly misunderstood in society, due to their need to "recharge" after social interaction (Rauch, 2003). The most recent research attempts to reconcile the introverted traits that clearly work against effective leadership, such as poor decision-making skills, with constructive data-based methods for overcoming the issues introverts face in leadership, especially in the workplace. Smith (2018) recognizes the issue of introverts in financial planning firms failing to take initiative in group discussions, and suggests using psychological reward

techniques to foster inclusion and respect toward introverts as he asserts that "our society systematically rewards extroversion and either directly or indirectly punishes introversion" (Smith 2018, p. 38). Similarly, Vien (2016) studies the accounting industry and suggests building networks, intentionally selecting a leadership style and sharing ideas in the workplace to increase visibility as viable options to mitigate the shortcomings of introverts. A 2015 study focused on the positive traits of introverts—i.e. analytical thinking, organization, attention to detail and caution—and connecting these to leadership roles. The study found that participants believed effective leaders could be introverts or extroverts, but believed that introverts must learn to compensate or exhibit some extroverted qualities in order to be successful (Stephens-Craig, Kuofie, & Dool, 2015). In a related fashion, Spark et al. (2018) found that a possible reason for introverts' lack of leadership presence is their tendency to negatively forecast their own performance before taking on tasks (Spark, Stansmore, & O'Connor, 2018).

While research has tackled the issues that introverts face in the corporate world, few have focused exclusively on the creative industries as the industry of choice. Studies suggest that there is indeed a psychologically-based link between creativity and traits associated with introversion, making the creative industries an essential corporate area to tackle.

Introverts and Creativity

Prominent psychologists Mihaly Csikszentmihalyi and Gregory Feist have both shown that some of the most creative minds are introverts, and that traits associated with creativity are highly correlated with the extroversion/introversion scale as a measure of the Big Five (Csikszentmihalyi, 1996; Feist, 1998). Further research shows that as creativity increased, artists and scientists were more achievement oriented and less affiliative, which are traits associated with introversion (Pritzker, 1999; Roe, 1974). J.P. Rushton and colleagues also reported that

creative, research-oriented psychologists were less extroverted than teaching-psychologists (Rushton, Murray, & Paunonen, 1983). In addition, a 2013 study found that introverts in a negative mood (with negative moods being more common in reserved, quiet individuals) produced more creative work than extroverts in a positive mood (Naylor, Kim, & Pettijohn III, 2013).

Corresponding with psychology's consensus that introverts turn inwards toward themselves in response to external stimuli, Eysenck (1994) defines creativity as "an individual cognitive process in which events occur within the person." Additional research corroborates the link between creativity and having a strong sense of "self" and introspective behavior; West and Farr (1990) listed introversion specifically as a characteristic of creative persons. Other studies found that having an internal locus of control, a highly introverted trait, also is a characteristic inherent in creative people (Isaksen, 1988; Woodman, Sawyer, & Griffin, 1993). Finally, Mackinnon (1962) found that two thirds of creative groups studied were introverts, and studied creative architects as "not of an especially sociable or participative temperament" (p. 492).

Although the links between introversion and creativity are pronounced in literature, some studies tend to focus on how introverted traits may stall creative progress. Especially in verbal creative tasks, shy introverts were negatively hindered (Cheek & Stahl, 1986). Another recent study found that shyness is negatively related to creative imagination (Kwiatkowska, Rogoza, & Poole, 2019).

Introverts and Physical Space

Similar bleak interpretations on introverts' performance persist in studies related to coping with varying physical spaces. In early research, Burgoon and Jones (1976) found that

introverts value "personal space" more seriously than extroverts, with extroverts approaching people and objects more closely and maintaining smaller distances. Williams (1971) similarly found that extroverts reporting being comfortable with allowing minimal personal space between them and another participant.

In relation to the working world, research has been conducted that has studied the effects of private versus nonprivate offices on factors such as satisfaction with work environment and productivity. Block and Stokes (1989) found that both introverts and extroverts prefer to work in a private environment rather than an open, social setting. Introverts in particular preferred closed-desk arrangements, including cubicles, to limit access into their work space in an attempt to reduce the arousal they experience in nonprivate settings. A reason for this preference includes the desire for introverts to experience less environmental stimulation than extroverts. In addition, individuals with an internal locus of control (common in introverts) often attempt to manipulate and master the environment, while others are more resigned to their environments (Eysenck, 1994; Little, 1987). With regard to personalization of workspace, including pictures, representations of extracurricular activities, art pieces, or framed certificates, introverts are wont to present fewer personal items to reduce stimulation and distraction. Introverts' lack of personalization is telling; in fact, the amount of personalization in a worker's space reveals more about extroversion levels than any other personality trait (Wells & Thelen, 2002). This study concludes by suggesting that managers allow employees to choose workspace rather than assign it based on department or job duties.

Introverts and Collaboration

Factors related to collaboration such as meetings and team projects are an additional concern for introverts in the creative industries. In an exploratory study that delved into the

minds and issues of introverts in college, the researcher found that introverts preferred to work alone, and to refrain from speaking up or present in class. In group projects (which parallel the team projects that are common in creative work) introverts reported being reluctant leaders and expressed distaste for mandatory social interaction—such as being called on arbitrarily by professors or being assigned to groups for busy work—impeded both their learning and focus (Zafonte, 2018). Work-based research attempts to solve this problem by looking into the possibilities of collaborating in virtual teams, which may be a benefit for introverts who process information internally and are adept at expressing themselves through writing (Geber, 1995; Holton, 2001).

In a study of open-plan offices, survey respondents reported that in-person collaboration was more frequent in open-plan offices than private offices; but half of introverts included in the study answered "negatively" to the question of how the design of their open offices allowed them to concentrate (Walsh, 2015). The study demonstrates the linkage between collaboration and physical space, and how these factors are tied to satisfaction with work overall. In the creative industries, nonprivate offices that are intended to encourage collaboration—which may result in a lack of focus—are on the rise.

The Creative Industries Today

Trade publications showcase the current mania in the creative industries celebrating loud, showy, open and airy offices, most notably in tech/creative giants like Google and Netflix. *Workspace Design & Build* proudly proclaims that "office putting-greens, vintage subway cars and revolving bookcases are among the zany features that can be found in Google's charismatic offices." According to Google, the open layout at headquarters is intended to convey that employees of all levels work together with "casual collision," rather than adhering to the

traditional hierarchical design. According to the article, what readers can learn from Google's "wacky workspace" is that "the design of an office has to reflect today's evolving work environment, and collaborative working is becoming increasingly popular" ("What can we learn from Google's offices about workplace design?," 2016).

In a similar vein, Business Insider visited Netflix headquarters and discovered that CEO Reed Hastings "floats around the office, moving from space to space meeting with people" in lieu of a private office. With impressive gadgets such as popcorn machines and electric cars used to easily navigate Netflix's campus, the office makes a statement. Eye-catching artwork and movie posters abound, and the design team's floor is entirely open and devoid of dividers (Yarow, 2013). Social media companies also embrace the open and airy style, with Teem proclaiming in an article considering top social media companies' office designs that closed-in areas have given way to more effective open office layouts that focuses "more on open communication, better team collaboration and creating a sense of community among employees." Pinterest, for example, has a mainly open floor plan separated only by glass-walled conference rooms. In the dining area, long tables encourage employees to meet new coworkers and work on their laptops in a collaborative environment. Twitter, too, incorporates informal, nonprivate seating areas ("A Peek at the Office Design of Top Social Media Companies," 2016).

However, a few voices are beginning to rise up against open-plan offices, with the Chicago Tribune proclaiming that "When dedicated desks are sacrificed in the name of 'creative flexibility,' when introverts are forced to attend more meetings at touchdown tables simply for the trendiness of meeting at touchdown tables, when a phone call echoes across 2,000 square feet . . . you begin to have a privacy crisis on your hands" (Pochepan, 2018). Privacy issues can be

detrimental to creative businesses, as all other functions can be affected—including inclusiveness, openness to experience or diversity.

The "Extrovert Ideal" and its Theoretical and Practical Implications

Susan Cain brought the importance and prevalence of introversion into popular consciousness with her bestselling book *Quiet*. She also raised awareness concerning the so-called "Extrovert Ideal—the omnipresent belief that the ideal self is gregarious, alpha, and comfortable in the spotlight," which has been perpetuated in Western culture since the late nineteenth century. Faithful to the belief in the marketing world that advertisements are reflections of public attitudes and culture, Cain notes that early advertisements played on people's fear that their personalities were not exuberant enough to achieve their goals. Numerous focused "obsessively on the hostile glare of the public spotlight" with companies from soap to shaving cream to detergent contributing to the perception that the bigger the personality, the bigger the success (Cain, 2013).

Likely due in part to bias toward the Extrovert Ideal, and misconceptions about introvert traits common in the workplace, representation of introversion in the general population is not paralleled in workplace leadership, or in the creative industries. According to Cain, favoring extroverts is "in our cultural DNA" as Greco-Roman ideals of charismatic speaking as well as the rise of cinema and movie stars became the "ultimate guide on how to be magnetic and charismatic" (Tucker, 2012). This ideal became ingrained in Western society with little to no leeway in appreciation of other traits and personality types.

With advertisements and public opinion accentuating extroverted qualities as both the cultural standard and preference, what fails to be reflected are introverts' prevalence in society as

well as their positive attributes and traits, including creativity. According to Scott Barry

Kaufman, "introversion is one of the most misunderstood dimensions of personality" (S. B.

Kaufman, 2014). Perhaps this accounts for some of the error in understanding introversion, and

especially its relationship with creativity. A study looking into the extroversion aspect of the Big

Five personality traits showed that mannerisms commonly associated with introversion—such as

introspectiveness and proneness to fantasy—are not actually correlated with the introversion-

extroversion scale and are not inherently introverted traits, resulting in misconceptions about

introverts and their tendencies (Grimes, Cheek, & Norem, 2011).

With introverts' high proportion of the population, the positive correlation demonstrated

between creativity and introversion, and the visible success of certain introverts like Bill Gates,

one might be tempted to assume that introverts are well represented in creative work

environments and are exposed to equal opportunity (Mallia, 2019). However, that type of

exceptionalism is decidedly not the rule.

The introvert personality represents a bona fide minority in the minds of the public, and

as such its members face the known difficulties with minority status. There is little recognition

(even among diversity advocates) regarding the value of what Karen Mallia calls "psychological

diversity," or the negative impact of minority status on employees (Kanter, 1977; Mallia, 2019).

As Kanter asserts in her 1977 Theory of Proportional Representation, minorities—in this

case, introverts—suffer from "tokenism", meaning that they face barriers, both psychological

and physical, that the majority do not face. Kanter makes clear that attempted assimilation from

the minority results in the token group becoming even more trapped in their roles (Kanter, 1977).

It follows that genuine equal opportunity in the workplace would not be achieved unless

managers were made more aware of unconscious bias and barriers to its token personality group—introverts (Santos, 2015).

Additionally, sociological theory can be applied to the polarization between introverts and extroverts: de Beauvoir's 1949 theory of the "second sex" (Beauvoir, 1961). De Beauvoir discusses the concept of "otherness" in the case of men and women, "thus it [otherness] is that no group ever sets itself up as the One without at once setting up the Other over against itself" (Beauvoir 1961, p. 6). This theoretical reasoning can be applied to personality type as well. As extroversion rose as the ideal personality type, qualities associated with introversion were increasingly seen in a negative light (Brown & Hendrick, 1971). Introverts are more commonly seen as the "other" opposite extroverts, something clearly evident in the business world (Harrell & Alpert, 1989).

The Creative Industries and Extrovert-Seeking Behaviors

Businesses generally, and the creative industries in particular, favor the extrovert ideal in their own organizations and leadership. This stereotype is so widely accepted, it is rarely questioned. This mode is infused into the open office environment—one abuzz with activity, energy and the pace of cultural change. It is an environment built by extroverts on the (false) presumption that everyone thinks and works the same way. Yet, that visual and auditory stimulation that energizes some creative people can create mental and physical discomfort in introverts (Cassidy & MacDonald, 2007; Geen, 1984; Stenberg, Rosén, & Risberg, 1990).

Accepting and internalizing the extrovert ideal in creative businesses results in the undesirable effect of biases in hiring. In a study geared toward understanding ingroups and outgroups, results indicated that not only was favoritism geared toward the outgroup, but participants had an easier time picturing extroverts performing job tasks in the introverted job

condition, such as solitary brainstorming (Lewis & Sherman, 2003). A study on the ways in which extroversion affects networks found that extroverts already present in a system are biased to place more extroverts in their network, resulting in an overpopulation of extroverts and an underpopulation of introverts. The study raises questions as to the formation of networks when a standard is already in place, and if extroverts truly are better socially calibrated (Feiler & Kleinbaum, 2015). A similar study found that CEOs who were extroverted predicted better success for other leaders of a similar personality type, showing stereotyping and bias of the "other" against introverts (Becker, Medjedovic, & Merkle, 2019). In the creative world, these extrovert-seeking behaviors manifest themselves physically through the open-floor plan.

The Open-Floor Plan

The office and the office door are nearly extinct. In the past few decades, creative workplaces have rapidly adopted open-plan office designs, based on the conventional wisdom that creative ideas flow from open space and constant collaboration. Open floor plans are ubiquitous in contemporary advertising agencies, design firms and digital media companies, executed in a variety of configurations. Little research actually explores the validity of these assumptions about successful collaboration, the potential impact of this type of work environment on creative employee productivity, or whether office design or environment may contribute to diversity successes or inequities in leadership. For example, it is well documented that factors such as work culture and work environment have a differing impact on the success of women and men. For the half of the human population that is introverted, those differences in success are studied less frequently.

It must be noted that creative workplaces have undergone tremendous change since the 1990s, both structurally and hierarchically. As real estate costs in large cities have soared,

cramming more people into fewer square feet resulted in pressure to innovate, relocate and reconfigure. Companies such as Facebook reinvented space and tiered structure, resulting in an open-floor plan and its subsequent propagation (Mallia, Windels, Mumah, & Broyles, 2013).

One study detailed the benefits for companies in implementing open seating, including: reducing costs, increasing communication between office inhabitants, reflecting the company's values through physical space, representing a culture of collaboration and lack of hierarchy, and integrating business functions (Davis, J. Leach, & W. Clegg, 2012). A *Digiday* article chronicled how a young intern at IPG Mediabrands was able to land a full-time job by regularly switching seats and conversing frequently with the managing director (Dua, 2016). However, academic and trade publications alike indicate that the topic is emotionally charged, reporting a rising tide of pushback against the trend of open-office plans. Lindsey Kaufman, an advertising employee and column contributor, wrote to the *Washington Post* in 2014 that "A year ago, my boss announced that our large New York ad agency would be moving to an open office. After nine years as a senior writer, I was forced to trade in my private office for a seat a long, shared table. It felt like my boss had ripped off my clothes and left me standing in my skivvies" (L. Kaufman, 2014). Kaufman's views echo Cain's examples of advertisements playing on a fear of the spotlight. Just as a 1922 soap ad warned "All Around You People Are Judging You Silently" (Cain 2013, 24), Kaufman complained in 2013 that in her new open office, "Nothing was private. . . . As an excessive water drinker, I feared my co-workers were tallying my frequent bathroom trips. At day's end, I bid adieu to the 12 pairs of eyes I felt judging my 5:04 p.m. departure time" (L. Kaufman 2014).

Kaufman describes the issues that many researchers report: creative workers feel frustrated in open offices—by frequent interruptions, reduced privacy, increased stress and

decreased cognitive functioning, and over-stimulation (Davis et al., 2012). Academic research

consistently finds that open offices are correlated with lower levels of motivation and reduced

levels of concentration (Hongisto, Haapakangas, Varjo, Helenius, & Koskela, 2016; Oldham &

Brass, 1979; Seddigh, Berntson, Bodin Danielson, & Westerlund, 2014). Studies suggested that

because employees who are more satisfied with their physical environments are more satisfied

with their occupations, that the physical environment plays an even bigger role than expected in

organizational well-being and effectiveness (Veitch, Charles, Farley, & Newsham, 2007). The

creative product is effected by this, as a 2015 study definitively notes the link between the

physical environment and creativity, particularly that physical space reflecting cultural aspects

like equality can lead to greater creativity (Kallio, Blomberg, & Kallio, 2015).

A *New Yorker* article, whose title referred to open offices as a "trap," states that "the open

office undermines the very things it was designed to achieve" as employees suffered on every

measure of workplace satisfaction including resentfulness and disruption, and the layout even

took a toll on physical health (Konnikova, 2014). New trends of "hoteling" and "hot-desking" in

advertising and public relations agencies—a lack of a designated space resulting in hopping from

space to space each day—has resulted in "less sociable and more irritable" employees due to the

"treasure-hunt" of finding a coworker, in addition to the disruption of moving belongings day in

and day out (Dua, 2016). To put that into perspective, a 2017 Senion report found that hot-

desking significantly increases the difficulty of finding a coworker more than in companies with

permanent desks, and that finding desks and meeting rooms grows more troublesome as more

agility between working spaces is introduced (Senion, 2017). One early example of a hot-

desking agency gone wrong is Chiat\Day in New York City, which in 1994 adopted a new

practice of employees leaving their belongings in lockers and grabbing a laptop and an open seat.

Soon after, employees began complaining of suppressing the creative process and too many distractions, so the company moved back to a traditional office format ("ChiatDay and the Invention of the 'Open Office,'" n.d.). A few companies are opting for a more dynamic atmosphere to avoid the failure that Chiat\Day experienced, but despite its flaws the seat-hopping practice remains in place in several major agencies (Dua, 2016).

Collaboration and Productivity as Functions of Personality

In addition to physical space, collaboration levels in a firm's creative projects contribute to workers' productivity, with one study finding a positive relationship between teamwork and group productivity (Moses & Stahelski, 1999). Numerous studies have reached a similar conclusion that creativity can come from two or more people working as a team (Csikszentmihalyi & Sawyer, 2014; Garber, Hyatt, & Boya, 2009; Mallia & Windels, 2011). And while it may be intuitive to assume that collaboration increases creative ideas and promotes a better brainstorming environment, other studies have shown that is not the case. While "wisdom of the crowd" is both a popular concept and a psychological phenomenon through groupthink, it is discredited in widespread literature.

In one of the first studies on group brainstorming, twenty-four groups were evaluated for idea generation; out of those, twenty-three groups produced ideas of equal or higher quality when working individually (Dunnette, Campbell, & Jaastad, 1963). Since the 1963 study, multiple researchers in fields ranging from management to counseling have agreed that performance gets worse as group size increases (Girotra, Terwiesch, & Ulrich, 2010; Mongeau & Mary, 1999). Despite the findings of academic research, trade publications on collaboration and the creative industries continue to accentuate the need for teamwork, collaboration and diverse work groups for maximum idea generation (DeGraff, 2015).

The Need for Flexibility in Creative Work Environments

The research suggests that open-floor plans and constant collaboration are not a perfect recipe for success for production of creative work. Yet, companies have been slow to catch up, mired in open seating and habitual team meetings. Psychologist Adrian Furnham wrote to businesses that employ group brainstorming that "If you have talented and motivated people, they should be encouraged to work alone when *creativity* [emphasis added] or efficiency is the highest priority. . . . It is odd that advertising agencies and design departments seem so reliant on brainstorming techniques, when all research suggests it is not the best strategy" (Furnham, 2000). And brainstorming is just one aspect of the creative process; at every step of the creative process, adhering too much to team standards is detrimental to overall productivity (Mumford, Lonergan, & Scott, 2002).

Research suggests that silence and solitude are the best paths to high productivity, despite creative industries' offices displaying an antithetical concept of ideal creative conditions (Charness, Tuffiash, Krampe, Reingold, & Vasyukova, 2005; Glenn, 2011). It is not only introverts who benefit from solitude or flexibility at work, but any and all personality types, as previously mentioned by Oseland (2009). Says Cain: "We need to create settings in which people are free to circulate in a shifting kaleidoscope of interactions, and to disappear into their private workspaces when they want to focus or simply be alone" (Cain, 2013, p. 93). Studies have shown that a sense of control over one's work environment—and making available a variety of spaces for versatile work including casual meeting areas, cafés, and quiet zones—provide a sense of satisfaction and team cohesion, although companies that have adopted hot-desking have a different perspective on flexibility (Konnikova, 2014; Lee & Brand, 2005).

Because continued forced proximity in the form of open offices and teamwork do not equal productivity, most notably for introverts, this study hopes to add to the literature by applying related research questions to workers in the creative industries. Creativity is desired across all industries—but nowhere is it more critical than in the cultural and creative industries where the entire business rests on the creative productivity of all workers. Little academic research has been conducted in the creative industries, especially regarding psychological personality factors and their implications within those industries.

Could an office environment created by, and for, extroverts possibly inhibit creative productivity—and in turn, undermine the success—of those who do not conform to the stereotypical ideal? Examining that and other related issues is the purpose of this thesis. My study here sets out to explore two critical concepts not previously examined together: extroversion level, and satisfaction with work in the creative industries. To gauge creative employees' space and collaboration satisfaction as well as deduce practical accommodations for introverts, a survey was conducted.

PURPOSE OF THE STUDY

The purpose of this study was to gather data regarding productivity and satisfaction among workers in the creative industries, and to determine if extroversion level was linked. Specifically, the study aimed to examine the following questions:

RQ1: Is extroversion/introversion level a factor in productivity and/or workplace satisfaction in the creative industries, especially relating to physical environment?

RQ2: Does personality influence desire for workplace changes in environment or collaboration?

RQ3: How can leaders in the creative industries improve workspaces and maximize the

creative productivity and strengths of diverse personalities?

The study was done because of the dearth of academic research on introverts in the

creative industries. While a number of academic and trade press articles have investigated

introverts and work, this study separates itself by homing in on creativity specifically, as well as

offering suggestions for improvement the creative industries and beyond.

METHODS

This exploratory research study is based on a survey sent to professionals working in the

creative industries, enterprises in that designation outlined by the UK DCMS (the entirety of

these industries were mentioned in the literature review). In-house creative departments were

added to the survey mailing list to include workers who do comparable creative work for a firm

whose primary purpose is encompassed by the DCMS definition. Consulting and freelance were

added as an industry option due to the creative problem-solving inherent in their work and the

knowledge that senior creative staffers within the creative industries often move in and out of

permanent employment or set up consultancies.

The participant pool was not limited geographically, but respondents worked only at

companies in the United States, largely in the eastern portion. This aligns with creative "clusters"

in which eastern cities such as New York dominate the market in most creative industries. Initial

contacts were reached via professional, personal or academic connection to the researchers,

accounting for the majority of participants being employed at marketing or advertising agencies.

The convenience sample was expanded via snowball sampling, requesting that potential

participants take the survey themselves, and through a specific appeal encouraging them to

forward the survey to other professionals in their own field or the fields listed by the DCMS.

Although complications could arise from a snowball sample, such as respondents being too

concentrated in a single professional industry, this was offset by the intention to single out

advertising as a field of interest. Including a range of creative industries supported the idea of

advertising as a creative field, and broadened the scope of the project. It also reflects the

increasing understanding of the creative industries as a unique entity for study, demonstrating

numerous shared characteristics among and between them that also differentiate them from other

types of industries (O'Connor, 2010).

The survey included standard demographic information, as well as descriptive multiple-

choice questions such as "What best describes the nature of your work?" Several open-ended

questions were designed to assess the nature of the respondents' current physical work

environment, as well as their attitudes toward their work space, and what they would change if

they could. Introversion/extroversion was assessed in the second portion of the survey, with a 20-

part questionnaire in Likert scale format, used in the 2007 study by DeYoung et al. and later used

by Scott Barry Kaufman for a *Scientific American* article (DeYoung, Quilty, & Peterson, 2007;

S. B. Kaufman, 2014). A simplified method of data analysis involving reversing some items and

averaging the results was employed by Kaufman to determine introversion level, and that was

used for this study.

On open-ended responses, buzzword coding was used to group answers by subject. For

example, for the question "What would you change about your physical work environment if you

could?", all responses referencing the ability to work in multiple kinds of layouts throughout the

day—from home, to collaboration rooms, to private offices, to coffee shops—was coded as

"flexibility." Similarly, all text entries alluding to wanting an office with a door were coded under "private space."

The survey was created, sent and analyzed via Qualtrics. Distribution was ongoing from April 2018 until August 2018, when the survey was closed to responses. Responses totaled 144, with one discarded due to a blank form, leaving valid usable responses totaling 143.

FINDINGS

Demographics

Demographics were collected for general knowledge and to assess personality levels for RQ1 and RQ2. Female participation was nearly double male participation, with 35% males and 65% females. This could be attributed to the large percentage of women in public relations and related jobs, which would outweigh the trend of men outnumbering women in design jobs as marketing and advertising was the largest creative industry represented (Khazan, 2014). The age of participants was slightly concentrated in the 25-34 group, with 37% of participants falling into this demographic. This is consistent with the median age reported in advertising of 38 years old (Mahoney, 2004).

Among the creative industries represented in the responses, the largest group was those in marketing or advertising firms, 38%. The next largest representation was those who were freelance/independent contractor (13%) and in-house creative department (11%). "Other" was also a significant category at 19%; but upon further review of the data, many respondents who selected this option could have fit into other provided categories, but considered their company too specialized to fall into one of the other industries. For example, one respondent who selected "other" wrote in "non-profit museum" rather than selecting "museum, gallery or library". All

other categories had a small margin of participants (under 10%) and "music, performing or visual arts" was not represented at all. The majority of respondents were full-time, on-site staff (68%).

One question probed the nature of the respondent's creative work, in a format permitting multiple acceptable answers. The largest categories were writing/editing (15%), creative supervision (12%), content creation (13%), and customer service/client consulting (12%). Several respondents who wrote in submissions for "other" described duties of strategy, event planning, and management.

Using Kaufman's (2014) methodology to ascertain introversion levels, 14% of the survey respondents were introverts, 41% were ambiverts (those who possess nearly equal characteristics of both introverts and extroverts) and 45% were extroverts.

Characteristics of Physical Space and Assigned Work

Characteristics of physical space and the nature of assigned work (including collaboration levels) were measured to gather data for RQ1, RQ2 and RQ3. Analysis of the responses related to physical work characteristics revealed that most of these creative professionals worked in an open setting with cubicles (23%), with the second most prevalent work space being a private office (19%). Most of the respondents spent the majority of their time at their designated work space (52%). Nearly half the respondents described their offices as relatively noisy with intermittent quiet periods (47%), while 41% described their workplace ambience as relatively quiet.

Questions also gauged participants' collaboration levels in their daily tasks. Most participants reported that they frequently work in small groups to achieve their tasks, with face-

to-face communication and meetings (53%). By contrast, only 6% of respondents reported nearly always working on projects alone.

Work Preferences and Productivity

Self-reported levels of ability to focus and preferences in environment were gathered to determine potential productivity (RQ1), gauge preferences for improvement (RQ2), and stimulate discussion on enhancing the creative workplace (RQ3). Respondents reported being most productive at work, sound-wise, when they listen to music through headphones (34%). Other sound preferences included having a slight buzz of music/conversation in the office (28%) and having complete silence (22%). Collaboration preferences were probed with the question "I complete work more efficiently and of better quality when…" Nearly three-fourths of workers indicated that feedback was important at later stages in the process, but initial work should be done alone (74%). General ability to focus at work found middle ground; 50% of respondents reported that their work environment is distracting at times, but overall their ability to get work done efficiently is not compromised.

Later in the survey, respondents had the opportunity to input open-ended comments about what they would change about their work if given the opportunity; this included projects, physical space, and general conditions. Asked "What would you change about your physical work environment if you could?", 33% of respondents alluded to wanting a more private space; 15% wished for a more flexible environment (see coding process in "Methods" section) to be able to move to private, collaborative, or home spaces when desired; 10% asked for more open co-working spaces; 13% felt distracted by lighting; 12% would make their space less noisy and prone to interruptions and 9% wished for a more inspiring or stimulating space, whether in decoration or general ambience. When describing better conditions in previous jobs, respondents

similarly listed missing their offices with doors, or the ability to switch work spaces when needed to bolster creativity. Many answers bolstered the idea that controlling the physical environment is the one of the keys to creativity. Notable answers for these questions relevant to dialogue about improving the creative industries with respect to space included:

- "I like to sit on sofas or chairs at work that make me feel like I am home with ample natural light—I don't like to feel like I am at work. I often go to a park by the office and work outside."

- "[What I miss about my previous job was that it was] collaborative, respectful of different personality types (extrovert, introvert) and energized."

- "I work best when I can control the environment. So, when I need to work alone in silence I can; when I need to be outside and get stimulated I can; when I need to work collaboratively in the office I can; and when I need to direct a team I can."

- "I don't like the bland "cube" work environment. I would prefer something that would be more inspiring."

- "As an introvert, my home office environment suits me perfectly. I know I can seek the company of others when I want, but more importantly, I have the security of knowing I can work in a quiet, solitary environment when needed (most of the time)."

- "[I would like to] have a place I can go that is quiet and distraction-free, but still offers group collaboration meeting areas."

- "We're moving to an open floor plan soon. . . I'm going to miss my cube."

- "Would love to have variety of spaces to work. I often go in conference rooms to work to not be disturbed and to focus. I will be getting a new desk soon that will allow me to stand at times in lieu of constantly sitting."

Notable answers for these questions relevant to dialogue about improving the creative industries with respect collaboration and nature of projects included:

- "Everybody's got an opinion and sometimes there are too many cooks in the kitchen, and a good idea can really get watered down because of it."

- "Would limit the number of people touching a project to a minimum and ensure the time needed for the work is just sufficient. More time and more brains seems to often lead to getting a project off brief and allows us to sweat the details instead of looking at the big picture."

- "I am the sole creative designer at my agency (which is a smaller agency, granted). It is often challenging not having the support of multiple team members when presenting concepts to clients. Multiple opinions are sometimes helpful in getting clients onboard with concepts."

- "There seems to be multiple checks and balances on some more simple projects which causes things getting delayed. I understand checks and balances are needed with larger projects but the number of people involved in smaller ones seems unnecessary and leads to length delays."

- "The work produced is typically not as creative or attention grabbing as it could be. Decision makers typically approve 'safe' options."

Relationship Between Personality and Preferences

A greater percentage of introverts (47%) than ambiverts or extroverts (30%) desired changes to their current office environment—citing the need for more private space or greater flexibility. When asked about the best characteristic of previous work environments, 20% of

introverts mentioned private space or flexible space, and 21% of extroverts and ambiverts mentioned these preferences.

Personality did not appear to correlate with getting distracted at work, as 76% of ambiverts and extroverts admitted to getting distracted at least sometimes at work; 60% of introverts admitted to experiencing a loss of focus due to distractions.

A chi-square analysis (N=143) was conducted on extroversion level and self-reported likelihood of getting distracted at work (Table 1). The findings were not significant, suggesting that ability to focus is not a determinant of extroversion level.

TABLE 1				
Ability to Focus by Extroversion Level				
	Distracted	Moderate	Not Distracted	Row total
Introvert	3 (15%)	9 (45%)	8 (40%)	20 (13.9%)
Ambivert	15 (25.6%)	26 (44.8%)	17 (29.3%)	58 (40.6%)
Extrovert	16 (24.6%)	37 (56.9%)	12 (18.4%)	65 (45.5%)
Column total	34 (23.8%)	72 (50.3%)	37 (25.9%)	143 (100%)
χ^2 (4, N=143) = 4.98, not significant at p < .05				

DISCUSSION

The results of the study were surprising in several ways. First, the percentage of respondents classified as introverts in the sample (14%) was much lower than expected. While no official statistics exist on the representation of introverts in creative jobs, we anticipated the percentage to be in the range of 30 to 50 percent—the representation of introverts in the overall U.S. population (CAPT, 2003). Research suggests that both introverts and extroverts possess traits of creative people (Solomon, 2018). Since a strong correlation exists between creativity and introversion (Furnham & Bachtiar, 2008), the authors expected to find that, if anything, *more* introverts working in creative jobs than would appear in the larger population.

The low percentage of introverts identified among the respondents could be attributed to the layout of the personality questionnaire, which did not encourage extreme answers of 1 or 5, which would have contributed to an introvert score. Introverts may be less likely to commit to extreme degrees of disagreement or agreement due to their quiet nature, so it may be that more introverts were hiding in the mix (Edwards & Smith, 2014). Many ambiverts scored close to the amount needed for introversion, so it is possible that the sample did not lack introverts, but that the introverts were harder to identify (as they tend to be) in the analysis. Other possible explanations lie outside the data set: first, that introverts though inherently creative may not pursue creative work as a career. Another possibility is that introverts self-select out of the profession early on, finding the environment incompatible with their personality type and personal work styles. Lastly, their under representation could be due to conscious or unconscious bias elimination of introverts in businesses where there is a documented preference for the extrovert in hiring and promotion (Allen, Quinn, Hollingworth, & Rose, 2013; Christensen, Drewsen, & Maaløe, 2014).

The overrepresentation of advertising or marketing professionals in the data set over other creative industries was not considered a setback in data collection. Advertising is a representation of the as creative industries, as it shares creative characteristics and processes with the other creative industries (content creation, writing, creative supervision, the need for quick, novel ideas). It stands as a valid indicator of professional life in the creative industries.

Work information, including amount of time spent at designated work area as well as the type of office layout present, was expected in light of prevailing standards in the creative industries. Open settings with cubicles is a popular choice, but the data also corroborate the observed trend for workspaces to becoming more and more open (Heerwagen, 2016). A surprising number of respondents selected "open area with long tables", showing that the movement of this design trend from high tech into creative industries is already widespread, even in relatively small firms. The use of technology in workspaces illustrates the fast-moving changes occurring. Mallia et al. notes that Bullock and Colvin (2015) expected smart phones, holograms and 3-D printers to be at work in 10 years, they are already in use (Bullock & Colvin, 2015; Mallia et al., 2013).

But more significant than the office layouts in creative enterprises are the employees' attitudes towards them. We expected answers to "What would you change about your physical work environment?" to be largely about easily tangible factors, like temperature and sound. While many respondents did mention these in their answers, a significant number were concerned with the entire layout and design of the office space, and wanted to make substantial changes in their opportunities for movement and flexibility at work. Creative workers appear to be well aware of the problem of bland, one-stop-shop offices that fail to inspire them—intuitively understanding what leading scholars have observed: that environment has a profound

impact on creative productivity (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Csikszentmihalyi, 2015; Mallia, 2019; Sternberg, 1999). An overwhelming number of respondents mentioned desiring different rooms or outdoor areas to explore depending on their productivity levels and mood or task difficulty; and it's time that the industry caught up with demands.

The authors expected that creative extroverts would not report feeling distracted at work; that they would thrive on the open floor plan; and that only the introverts would feel uncomfortable and unproductive in open offices. Recall that simply altering noise, light and temperature levels can be detrimental to introverts (Belojevic, Jakovljevic, & Slepcevic, 2003; Harma, 1993; Vischer, 2008). But this research uncovered an even bigger revelation about the creative industries—that *all* personality types across the spectrum of introverts to extroverts in the creative industries fall prey to distractions and desire the same changes in their workplaces. It is true that extroverts and introverts possess different strengths in the workplace; introverts are better able to crank out novel ideas and plans on their own, and extroverts thrive on collaborative innovation, asserting and selling their ideas. Due to radically different strengths and weaknesses in the workplace, we expected also for introverts and extroverts to have entirely different perspectives on what could be done in order for them to be more productive at work; but this turned out to be entirely false. A huge proportion of all respondents longed for flexible workspace and private space.

Clearly, a creative workspace should be a place that is flexible and responsive to the varied needs of the people who work within it—if leaders want them, and their creative businesses, to flourish and succeed. While quieter people may enjoy a private office and others a more open setting, one thing remains consistent: all creative workers want to be able to switch

environments when they feel they have had enough of a single condition for too long—and if the ability to do so is compromised, it is likely that the quality of the creative product goes down. For smaller offices, configuring a flexible office is more challenging; but even offering employees the option to work for a few hours at a nearby coffee shop, or encouraging working from home once a week, can go a long way in employee satisfaction and productivity. Happily, flexible workspaces are becoming increasingly popular, rivaling the problematic completely-open model (Altman, 2018). Due to the staggering number of extroverts who report workplace distractions—75% in this study—offices should afford each creative worker space for necessary solitude in addition to more collaborative areas.

Easily discernable in the direct quotes reported above is the ubiquitous desire for employees to be able to control their environment—whether by working from home, choosing the configuration of their personal space, or conducting team meetings. The desire to control workspaces is prevalent in literature as well (Converse, Pathak, DePaul-Haddock, Gotlib, & Merbedone, 2012). Especially for introverts, this sense of control could be extremely beneficial in boosting confidence and achieving a sense of comfort and control that is often not found at fast-paced creative firms. Some firms are already incorporating this idea. In a New York Times digital sponsored ad for WeWork, the company emphasized its commitment to creating workspaces based on research rather than ideals. The copy says WeWork "designed workspaces with distinct areas for focused thought, group brainstorming, recreation and relaxation" and includes "multifunctional areas that can be assembled to support individual work, team projects or employee functions." Most importantly, WeWork recognizes that high-performing employees are more likely to report that flexible work environments make companies stand out ("It's

Possible to Design a Workspace That Employees Love. Here's How. (Paid Post by WeWork from NYTimes.com)," 2018).

While co-working companies may begin to recognize the need for flexibility, this knowledge must trickle down to managers and their employees. In the creative industries, responses reported in the findings also show that introverts are often aware of their own status as introverts (see #5), and thus it is important for managers to recognize the quieter personality type and the value introverts can contribute by providing environments that account for their preferences and allow them to flourish. This desire for control and autonomy is not surprising, considering the characteristics associated with creative personality, especially their tendency to be both extroverted and introverted and alternate between bursts of energy and activity and the need for solitude and quiet (Csikszentmihalyi, 1996). It is imperative for leaders to understand the creative process to build an optimal climate for creativity (Amabile et al., 1996; Mallia, 2019).

But it's not just up to leaders to break the cycle of space not matching the needs of all diverse employees, and to bring more cultural awareness into the workplace. Perhaps if the trend were to continue shifting toward flexible, multiple-option floor plans, introverts would feel more empowered and able to go into future jobs knowing what they want and bringing control to their environments (as extroverts are known to be more adept at asserting their preferences to employers). This goes for project management as well; collaboration was shown in the survey to be looked upon favorably, but individual work should be valued equally, as individual work is the start of some of America's most successful people and companies.

Psychological Diversity and Inclusion

An additional measure that the creative employee can take to increase autonomy is encouraging awareness of psychological diversity, or diversity of personality. This kind of diversity is infrequently studied, but equally important to the buzz that surrounds cultural and ethnic diversity. Just as a creative company is unlikely to produce novel concepts and ideas if all of its employees hail from similar racial and socioeconomic backgrounds, stalling of creative progress is present and imminent if awareness of diversity of personality is not inputted into the public consciousness.

Academic research on psychological diversity is scant, but Forbes wrote in 2018 that companies definitively should understand diversity's value in the workplace "beyond the 'feel good' optics of having men and women with different racial and ethnic backgrounds working together" by considering cognitive diversity, because "if everyone sees a situation from the same perspective, it's easy to get blindsided by something that would have been obvious to someone with a different outlook" (Toomey, 2018). While it is natural to connect with coworkers similar in personality, building an organizational team with members who think and process information in unique ways is critical to fostering innovation, whether that be through process or "light bulb" innovation.

A 2019 study recognized the benefits of cognitive diversity in problem solving, productivity, and organizational learning. In fact, cognitive diversity may contribute to a kind of collective intelligence that allows a team to work together across a wide variety of tasks. (Aggarwal, Woolley, Chabris, & Malone, 2019). Other recent research not only demonstrated the links between cognitive diversity and creativity, but also found that cognitive diversity influenced innovative work behavior positively according to data from 101 teams. The

researchers specifically cautioned against emotional exclusion (Chen, Liu, Zhang, & Kwan, 2019).

The benefits of cognitive diversity for businesses are evident, and point to a need for inclusion and an elimination of the feeling of "otherness" and tokenism that plagues introverts in the creative workplace. Inclusion and team learning mediate the effect of cognitive diversity on creativity, and inclusive leadership increases work group effectiveness and elevates overall attitudes (Chow, 2018; Randel et al., 2018). Observing research by fostering awareness and inclusion of introverted types contains invaluable advantages for companies looking to both boost their public image and their internal employee satisfaction.

CONCLUSION

"I am an introvert" may be a common phrase among the reserved and introspective community, but its impacts and consequences are currently lost on the creative industries. Respondents of the study, both introverts and extroverts, found the high number of people contributing to creative projects tiring, preferring to limit the size of work groups to only a few. Many workers are cognizant of the problems that their current workspace presents, which are often identical to the organizational questions that research has answered. It is now time for the creative industries to catch up with employees' needs.

While cognitive diversity is a relatively new concept applicable to work environments, its up-and-coming status in psychological and teamresearch signifies its importance in the corporate world. The simultaneous rise of the awareness of cognitive diversity and flexible workspaces indicate a new era of public views toward personality, collaboration and relative productivity—an era in which giving introverted employees autonomy over their work lives could revolutionize

a culture that had previously relied on false assumptions about collaboration, the ideal

personality type, open office justifications.

The "Extrovert Ideal" is an intimidating force exerting influence on culture, leadership

and the creative industries. It is increasingly becoming an untenable measure for creative

employees to live up to. It is particularly punishing to introverts, yet even extroverts do not

desire constant company and collaboration. This study should serve as a wake-up to creative

industry professionals—especially those in advertising, where open-floor plans often supplant

other alternatives. Neither the "loudest" personality type nor the accountants should dictate

workplace practices. It is vital to listen to all employees, even the quieter ones. They want to be

recognized for their wide range of strengths across projects, and desire spaces and tasks that will

challenge them to diversify their ideas to the extent of a flexible workplace. Unless management

wants to undermine the creativity of creative people, the very foundation upon which their

success rests.

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