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# Do You Feel Like a Fraud? How Experiencing the Impostor Phenomenon Influences Consumption Choices

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DO YOU FEEL LIKE A FRAUD? HOW EXPERIENCING THE IMPOSTOR PHENOMENON  
INFLUENCES CONSUMPTION CHOICES

by

EMILY GOLDSMITH

A dissertation submitted to the Graduate Faculty in Business in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2018

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This manuscript has been read and accepted for the Graduate Faculty in  
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## ABSTRACT

Do You Feel Like a Fraud? How Experiencing the Impostor Phenomenon Influences

Consumption Choices

by

Emily Goldsmith

Advisor: Stephen Gould

Most of us, at one point, have felt like a fraud. Usually we can overcome the negative feelings associated with feeling like a fraud by acknowledging why we deserve our accomplishments. However, there are times when, despite all external evidence, we still feel like an impostor. A person experiences the impostor phenomenon when they are unable to internalize their achievements and they have the constant fear of being exposed as a fraud. The current research examines each of the four behaviors associated with experiencing the impostor phenomenon and examines how they influence our consumption behavior. The impostor cycle is a model that shows how achievement related tasks lead to emotions and behaviors that perpetuate the impostor phenomenon. We examine how individuals experience the impostor cycle differently and how this impacts their consumption decisions. In eight studies, including one pretest, we demonstrate how the goal of avoiding detection as a fraud influences product preferences, and how the two different paths of progressing through the impostor cycle, self-handicapping or over-preparing, influences the willingness to pay for products.

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*Contribution Statement.* The impostor phenomenon was initially investigated by counselors who were seeking to understand the common experiences of young women in college. Since then, a considerable body of work in the psychology literature has examined the antecedents and consequences of the impostor phenomenon. This psychology research is valuable because it clearly identified factors that contribute to the impostor phenomenon and how different groups of people experience the impostor phenomenon. This research is the first work to develop a manipulation for the impostor phenomenon. Creating the impostor phenomenon manipulation allowed us to study the impostor phenomenon experimentally. This work also contributes to the consumer behavior literature by examining how experiencing the impostor phenomenon influences consumption decisions. This is the first time that the four common behaviors associated with the impostor phenomenon and the impostor cycle is being examined from a consumer behavior and marketing perspective. We establish that impression management concerns drive behaviors that are designed to avoid being detected as a fraud. We find that people who are experiencing the impostor phenomenon are more likely to prefer conspicuous products that are consumed publically and products that allow them to appear more likable. We also find that the different paths of the impostor cycle, the choice to self-handicap or over-prepare, influences how much people who are experiencing the impostor phenomenon are willing to pay for products.

## Introduction

“There are still days where I wake up feeling like a fraud, not sure I should be where I am” – Sheryl Sandberg

“I have written eleven books, but each time I think, Uh oh, they’re going to find me out now”- Maya Angelou

“No matter what we’ve done, there comes a point where you think, ‘How did I get here? When are they going to discover that I am, in fact, a fraud and take everything away from me?’” – Tom Hanks

The three quotes above come from individuals who have reached the pinnacle of success in their respective fields. Despite the fact that their achievements have been universally recognized, they still have feelings of self-doubt and fraudulence. Deemed the “impostor phenomenon”, it is common for high-achieving individuals to exhibit a fear of being exposed as a fraud (Clance et al., 1995). This is a common occurrence among consumers, as 70% of men and women have at one point or another experienced the impostor phenomenon (Gravis, 2007).

There are many contexts where consumers may experience feelings of being an impostor, where they are not internalizing achievements and their behaviors are driven by the fear of being discovered as a fraud. For example, Striegel-Moore et al. (1993) found that there is a positive correlation between disordered eating and perceived fraudulence. The study found that bulimic women focused on how they were viewed by others and were concerned about meeting the high expectations that others had for them. The disordered eating habits stemmed from feeling fraudulent and internalizing a false sense of self. The impostor phenomenon has also been used to explain the persistence of social forces, such as the lack of women in managerial positions (Kahn & Yoder, 1989; Clance & O’Toole, 1987). Women who are experiencing the impostor phenomenon are less likely to seek advancement opportunities at work because they have failed to internalize their abilities and do not believe they have the competence to perform at a higher

level. We seek to better understand how the impostor phenomenon functions to influence consumer behavior in the marketplace. In this paper, we present a conceptual framework rooted in the impostor cycle (Clance & Imes, 1978) to demonstrate how four common behaviors that are associated with experiencing feelings of fraudulence can influence consumption behaviors. More specifically, we will demonstrate that individuals who are experiencing the impostor phenomenon will prefer products that will allow them to display competence and likability due to a motivation to construct the image that they are not a fraud, despite their inability to internalize their success.

### **Literature Review**

The impostor phenomenon is a discrepancy between an individual's perceptions of their own achievements and others' perceptions of the same (Clance et al., 1995). Individuals who experience the impostor phenomenon do not internalize success and, upon being recognized for their achievements or intelligence, fear they have fooled others into thinking better of them (Clance & Imes, 1978). Rather than internalizing success, people who experiencing the impostor phenomenon internalize that they are frauds and they are not as capable as others see them as (Cowman & Ferrari, 2002). When an individual is experiencing the impostor phenomenon they negate and deflect any external evidence that they are not an impostor and continuously fear that others will detect that they are an impostor.

For example, a person who is suffering from the impostor phenomenon may believe that they were accepted to graduate school because they got lucky and the admissions committee made a mistake. They feel that they are not qualified to be a graduate student even though they maintained good grades, had high test scores and submitted strong application. The graduate student mistakenly believes that they are not qualified to be in the program despite strong

external evidence of their qualifications. This results in symptoms such as generalized anxiety, a lack of self-confidence, depression, and frustration related to the perceived inability to meet high self-imposed standards of achievement (Clance & Imes, 1978). A defining characteristic of this phenomenon is that, while the capable achiever does not perceive him or herself as deserving success, others do not perceive the achiever as undeserving.

The first investigation of the impostor phenomenon was among accomplished women who shared the belief that they did not deserve the success and recognition that they had earned (Clance & Imes, 1978). The women that were studied viewed their perceived success and recognition as fake and feared that others would discover their secret- they were not as accomplished as they appeared. The fear of being detected as a fraud led the women to attribute their success to luck, the need to work harder than anyone else, errors, or charm (Clance et al., 1995).

It is important to note that individuals experiencing the impostor phenomenon are different from real impostors and frauds (de Vries, 2005), where the distinction for our phenomenon is the absence of deceptive intention, and the presence of warranted accolade. True impostors take on a false identity with the intention of deceiving others and intentionally misrepresent their actual abilities. There are situations where true impostors are overconfident in their abilities; this happens because people are motivated to hold favorable views of their social and intellectual abilities (Kruger & Dunning, 1999). This is termed the Dunning-Kruger effect, and describes situations where people are unaware of their deficiencies in their social and intellectual capabilities (Dunning et al., 2003). The Dunning-Kruger effect is similar to the impostor phenomenon because in both situations the person's perceptions of their abilities do not correlate with their objective performance. People who are experiencing the Dunning-Kruger

effect are unaware that they are incompetent while people who are experiencing the impostor phenomenon are unaware that they are competent.

When other people detect that the true impostor is misrepresenting their actual abilities, they will question the impostor's authenticity. Frauds and impostors seek unjustified personal gains and do not experience negative psychological responses when they receive credit for accomplishments or qualities that are the result of deception. In contrast, individuals who are experiencing the impostor phenomenon are actually competent and capable; their internal experience of failing to achieve any accomplishments does not match their external abilities. Additionally, observers see their successful accomplishments and recognize that the person experiencing the impostor phenomenon deserves their success.

Despite the reality that other people cannot detect when someone is experiencing the impostor phenomenon, we theorize a distinguishing psychological process where individuals experiencing it are fearful of being "found out" and behave accordingly. The literature proposes four phenomenon related behaviors, which we outline in the following section.

#### **Four Impostor Phenomenon Behaviors**

Clance and Imes (1978) identified four different behaviors that people experiencing the impostor phenomenon commonly exhibit. These behaviors are exhibited even though there is objective evidence that the person displaying these behaviors is competent and has earned his or her achievements.

The first behavior is maintaining a sense of phoniness. This behavior manifests in a number of ways, including engaging in intellectual inauthenticity. A person who is experiencing the impostor phenomenon does not want to be considered unintelligent or incompetent; therefore they will go out of their way to demonstrate their competence to others (Clance & Imes, 1978).

Maintaining a sense of phoniness can be seen as a form of self-enhancement. Packard, Gershoff, and Wooten (2016) examined how boasting, as a means of self-enhancement, impacted others' social perceptions and persuasion. They found that boasting as a form of self-enhancement is perceived differently, depending on the trust cues that are exhibited. When there are low trust cues, the observer has heightened vigilance about the boaster's motives and will be less likely to be persuaded. However, when the boaster can be trusted, the boasting is seen as a signal of expertise and credibility and the observer is more likely to be persuaded. Others should see people who are experiencing the impostor phenomenon as trustworthy because there are objective ways to determine that they have earned their accomplishments. Therefore, people who are experiencing the impostor phenomenon get positive reinforcement from others, in the form of not being exposed as a fraud, when they publically demonstrate that they are competent. This means that the person who is experiencing the impostor phenomenon will go out of their way to demonstrate their competence, even if they personally believe that they are not competent and do not deserve their achievements.

Consumption choices and behaviors change when a person is trying to influence their reputation (Griskevicius, Tybur & Van den Bergh, 2010). For example, people are more likely to prefer green products compared to a luxurious product because of the prosocial reputational benefit that comes with purchasing green products. This effect was only found for people who were shopping in public, not in private, because people were concerned about how they appeared to others. A person who is experiencing the impostor phenomenon may tell people, for example a supervisor or coworkers, what they want to hear. Another example is choosing to engage in tasks or other behaviors that display a bias that is intended to support the ideas and opinions of someone else, rather than the person's true beliefs (Clance & Imes, 1978). People who are

coping with the impostor phenomenon by maintaining a sense of phoniness should prefer public products that allow them to exhibit that they are competent and aid in controlling other people's perceptions, particularly seeing him or her as competent. Maintaining a sense of phoniness involves signaling to convince other people that the person experiencing the impostor phenomenon is competent; the goal is to avoid being detected as a fraud. This is different from the second behavior, using charm to win others over, because the second behavior focuses on distracting others so they do not see the person as a fraud, rather than convincing others that they are not a fraud.

The second behavior is using charm to win others over. This happens when a person who is experiencing the impostor phenomenon wants to appear more likable to others so that others will not detect him or her as a fraud (Clance & Imes, 1978). Using charm to win others over occurs in many ways. A person will attempt to flatter and impress others, refrain from expressing their own opinions, and act friendly. The person experiencing the impostor phenomenon believes that they can win others over using their friendliness, charm, physical appearance, and perceptiveness. This is distinct from the first behavior, maintaining a sense of phoniness, because the first behavior focuses on convincing other people that the person experiencing the impostor phenomenon is competent. Once a he or she wins someone over, he or she believes that they will not be detected as a fraud because the other person likes them. The person mistakenly believes that the other person is focusing on their charming and friendly characteristics rather than the fact that they are incompetent and undeserving of their success.

The success of using charm to win others over can be explained by the halo effect. The halo effect explains how evaluations of a person's attributes can influence the global evaluation of the person (Nisbett & Wilson, 1977). For example, if a person has an attractive physical



appearance other people are more likely to think that they have other positive qualities, such as intelligence and competence, and they will be viewed more positively. Other work has shown that when people cooperate with others as a way to maintain a good reputation, they are rewarded in future social interactions (Semmann, Krambeck, & Milinkshi, 2005). Using charm to win others over perpetuates the impostor phenomenon because the person engaging in these behaviors believes that he or she was not detected as a fraud because other people liked him or her, not because of his or her true competence (Clance et al., 1995). These behaviors result in the inability of the person experiencing the impostor phenomenon to internalize his or her success.

The third behavior is avoiding success due to the fear of being detected as an impostor. A person who is experiencing the impostor phenomenon will feel overwhelmed by tasks, even when he or she has successfully completed similar tasks (Clance et al., 1995). The anxiety and guilt that comes from a perceived lack of achievement means that people who are experiencing the impostor phenomenon did not internalize their previous success; the anxiety and guilt also functions as a barrier to striving for future success (Kahn & Yoder, 1989).

The fear of being detected as a fraud can lead to a person who is experiencing the impostor phenomenon to avoid intellectual challenges because he or she will worry that it will be impossible to maintain the façade of being competent. This is a form of self-handicapping, a maladaptive way to self-regulate by inhibiting one's own performance (Steel, 2007). People who are experiencing the impostor phenomenon self-handicap so that they have an excuse if they fail to accomplish a task or if they are detected as a fraud (Clance & Imes, 1978). Another common way to avoid success is to procrastinate in the face of deadlines. Procrastination is the "irrational tendency to delay tasks that should be completed" (Lay, 1986). Past research has shown that people are more likely to procrastinate when they focus more on short-term rather than long-term

goals (Lynch et al., 2010). The person experiencing the impostor phenomenon procrastinates because he or she struggles to balance the pressure to maintain their successful and competent image with their fear of being exposed as a fraud.

The fourth behavior is diligence and hard work. This behavior is driven by the constant fear that the person who is experiencing the impostor phenomenon will be discovered as a fraud (Clance & Imes, 1978). In order to avoid being detected as a fraud, the person will work hard to prevent detection. A fear of failure drives the need for diligence and hard work (Flett et al., 1992). The fear of failure drives maladaptive perfectionism, where the individual strives to reach unrealistic standards (Stober & Childs, 2010). The achievement motivation literature has shown that behaviors associated with the fear of failure persist because of the shame and humiliation that are associated with failure (Atkinson, 1957). Individuals are more likely to be aware of the consequences of failing, and thus have a higher fear of failure, when they view evaluative situations as threatening (Conroy, Kaye & Fifer, 2007). This relates to the impostor phenomenon because people who are experiencing the impostor phenomenon are fearful that others will detect them as a fraud.

This behavior of diligence and hard work is reinforced because the hard work results in approval from others and success in the tasks that were undertaken. Rather than internalizing the success, a person who is experiencing the impostor phenomenon will believe that the hard work is necessary to be successful; even though the level of effort that was exerted is more than is necessary to be successful.

To summarize, when individuals experience the impostor phenomenon (ie., receive deserved external positive feedback that they internally believe is undeserved), they are motivated to avoid being detected as a fraud. Behavioral outcomes of the impostor phenomenon

are associated with social appeal (displaying competence, charm/likeability) and effort (increased or decreased) toward subsequent achievements. To address the first of these outcomes, displaying competence, we look to the consumer behavior literature related to social signaling, also known as conspicuous consumption.

### **Conspicuous Consumption**

Individuals often use their consumption behavior to protect the self-concept and disguise information that suggests a self-deficit. Previous work on conspicuous consumption found that the demand for conspicuous products is driven by social rather than utilitarian goals (Veblen, 1995). Engaging in compensatory consumption can help an individual deny or avoid information that threatens an individual's self-concept (Kim & Gal 2014). We propose that a person who is experiencing the impostor phenomenon will deliberately select products that perpetuate a sense of phoniness to signal to others that they are competent.

Compensatory consumption allows an individual to bridge the gap between their actual self and their ideal self. This relates to feeling like an impostor because an impostor believes that they are not competent and they do not deserve the success that they have achieved. This perception of the actual self does not align with the impostor's ideal self. This is particularly important in how people experiencing the impostor phenomenon present themselves to other people- these people focus on convincing others that they are not a fraud.

Past work has focused on the self-presentation strategies associated with the impostor phenomenon and has found that impostors are more likely to engage in behaviors, such as self-deprecation, when they believe that their behavior is public, but not private (Leary et al., 2000). Additionally, the desire to maintain a reputation influences the actions of people in public, but not in private (Griskevicius, Tybur & Van den Bergh, 2010). Impostors want to deceive others

into thinking that he or she is not an impostor. Therefore he or she engages in compensatory consumption to avoid the signs that he or she is an impostor and to convince others that he or she is competent and deserves his or her accomplishments.

When an individual feels like an impostor they should prefer products that demonstrate competence in a particular area or disguise perceived flaws in order to convince others that they are not a fraud. The literature points to conspicuous consumption as the route through which consumers make consumption decisions to control how others perceive them. Wang and Griskevicius (2014) found that other women with designer outfits and jewelry were inferred to have a more devoted male partner. When woman had a mate guarding motive they had a desire to protect their self and control what others thought of them. Conspicuous consumption served a signaling purpose by letting other women infer that the target woman had a mate and let the target woman fulfill their mate-guarding motive. These women drew larger logos than women who did not have the same motivation to protect how others saw them. The larger logos represented an increased desire for conspicuous consumption.

O’Cass and Frost (2002) found that people who place a higher importance on the opinions and approval others prefer products that have images. Additionally, self-congruity theory states that there is congruence between the product and the consumer of that product (Sirgy et al., 1997). Essentially, the associations that people have with a product also translates to the person that owns the product. People who feel like an impostor should prefer conspicuous products that are consumed in public because they are attempting to control how others perceive them; they have the motive to appear competent and worthy of their achievements and convince others that they are not a fraud.

## **Impression Management**

When an individual is experiencing the impostor phenomenon he or she engages in the first two behaviors (maintaining a sense of phoniness and using charm to win others over) described above as an impression management tactic. Impression management is when a person tries to control or influence the impressions that others have of them (Leary & Kowalsi 1990). Leary and Kowalsi (1990) developed a two-component model of impression management. The first component is impression motivation, which relates to the motivation that people have to control how others see them. The second component is impression construction; this refers to the methods that an individual uses to create the specific impressions that he or she wants.

Individuals engage in different behaviors based on their impression management goals. Some people have self-promotion goals; this is when a person wants to create the impression that they are competent. This is directly related to maintaining a sense of phoniness- where people who are experiencing the impostor phenomenon want to convince others that they are not a fraud by displaying that they are competent. Other people have ingratiation goals; this is when a person wants others to believe that they are likable (Ratner & Kahn 2002). This is related to when people who are experiencing the impostor phenomenon use charm to appear likable and win others over as a way to distract other people from detecting that they are a fraud. The motivation to avoid detection as an impostor leads to the construction of a curated image that is designed to show that a person is competent, likable, and deserving of their accomplishments, thus fulfilling impression management goals.

The impostor phenomenon literature has demonstrated that individuals who are experiencing the impostor phenomenon engage in impression management (Kolligian & Sternberg 1991). It is important to distinguish impression management from self-monitoring.

Self-monitoring is when an individual changes their behaviors based on the social situation. This is often done in a positive way and is not based on any negative feelings about the self (Harvey 1981). The impostor phenomenon is based on negative feelings of insecurity and the inability to internalize accomplishments; therefore people who are experiencing the impostor phenomenon monitor their behaviors with the purpose of managing the impressions that others have of them. People who are experiencing the impostor phenomenon are aware of the image that they want to project to others and they want to avoid being detected as a fraud. Therefore, they use the consumption of conspicuous products and products that improve perceived physical imperfections as a way to signal to others that they are competent, likable, and free of flaws.

Individuals who are experiencing the impostor phenomenon are concerned with their self-worth and their social image so their decisions and behaviors reflect their impression management concerns. Impostors believe that they are a fraud and they have the goal of preventing others from detecting that they are a fraud. An impostor believes that their impression management techniques were successful if they believed that they have fooled other people into believing that they are not a fraud (Katz, 1986). Despite the fact that the impostor has successfully created the impression that they are competent and likable, he or she still is afraid that someone will detect and expose that he or she is a fraud. This perpetuates the impostor cycle and the person experiencing the impostor phenomenon will be motivated by the fear of being exposed as fraud and will continue to let their impression management goals guide their behavior.

### **Implicit Self Theory**

Early research on the impostor phenomenon suggests that a person who is experiencing it views intelligence as fixed (Langford & Clance 1993). They fail to internalize their success

because they attribute their success to a number of other reasons other than their own competence. People who experience the impostor phenomenon believe that they are a fraud that deceived other people by using charm, working harder than everyone else, or by getting lucky. Instead of believing that their hard work results in increased intelligence, they believe that they do not deserve their successes and merely fooled other people into believing that they are smart.

Implicit self-theory distinguishes between the tendency to view personality traits as fixed (entity theorists) or malleable (incremental theorists) (Dweck, Chiu & Hong, 1995). Entity theorists believe that attributes are fixed, trait-like entities; this results in interpreting outcomes and actions in terms of fixed traits. Incremental theorists view attributes are malleable and dynamic. This results in a focus on outcomes and specific actions rather than on broad traits.

Entity and incremental theorists act differently when they are faced with a challenge or setback (Dweck & Leggett, 1988). Incremental theorists focus on the behavioral factors that lead to their challenge or setback and respond by engaging in actions or behaviors that allow them to reach their goals and master the task at hand. They believe that intelligence and ability can be improved through effort (Dweck, 1999). Entity theorists view themselves as helpless in the face of challenges and setbacks because they do not believe that they have the ability to change.

Implicit self-theory has also been examined in the consumer behavior literature. Yorkston, Nunes & Matta (2010) found that incremental theorists are more accepting of brand extensions than entity theorists. Huang, Dong & Mukhopadhyay (2014) found that entity theorists had a higher need for uniqueness than incremental theorists. Entity theorists were more likely to purchase a minority-endorsed brand and incremental theorists were more likely to purchase a majority-endorsed brand. This is because entity theorists attribute their experiences to their traits and incremental theorists attribute their experiences to their efforts. This finding

corresponds with the earlier implicit self theory research that demonstrated that incremental theorists focus on improving themselves through effort (Dweck, 1999).

We theorize that an entity theorist who experiences the impostor phenomenon will not engage in the associated behaviors (conspicuous consumption, social appeal, and increased/decreased effort) because they believe that they are truly a fraud. On the other hand, incremental theorists focus on behaviors and actions and will act in a way that allows them to achieve their goals. In the case of a person experiencing the impostor phenomenon, the goal is to avoid being detected as incompetent by other people. Accordingly, we theorize that incremental theorists who are experiencing the impostor phenomenon will take action to achieving their goal of avoiding detection as a fraud by choosing products that will allow them to appear more likable and charming.

### **Impostor Cycle**

The impostor cycle describes how the impostor phenomenon is maintained, despite objective evidence of ability and competence (Clance & Imes, 1978). The impostor cycle begins when a person faces an achievement related task. This can be a new opportunity, such as a new job, or a new task (Clance et al., 1995). The achievement related task leads to feelings of anxiety, self-doubt, and worry.

After experiencing these negative emotions, the person experiencing the impostor phenomenon will respond in one of two ways. The first way is to self-handicap. Self-handicapping is when a person avoids exerting effort as a way to keep potential failure from hurting his or her self-esteem (Kolditz & Arkin, 1982). For example, a person who self-handicaps is more likely to make excuses when something goes wrong (Strube, 1986). When a person self-handicaps, he or she intentionally creates obstacles that can be used to explain why



they failed to successfully complete a task; this can reduce the negative feelings that can occur when a task is not completed successfully. One common way to self-handicap is to procrastinate. After procrastinating and rushing to finish a task, the person who is experiencing the impostor phenomenon will attribute success to luck rather than competence and ability.

The second way to respond to the negative emotions is to over-prepare and act like a perfectionist. When a person experiencing the impostor phenomenon over prepares, he or she spends more time on a task than is necessary (Clance, 1985). When he or she succeeds, instead of attributing the success to ability, he or she believes that he or she worked much harder than anyone else. The person attributes their success to hard work rather than ability or competence and he or she believes that they will not be able to replicate their success unless they put in the same amount of effort in the future (Sakulku & Alexander, 2011).

People who are experiencing the impostor phenomenon commonly over-prepare by acting like a perfectionist. Perfectionism is when a person strives to be flawless and sets high performance standards (Stober & Childs, 2010). Mild levels of perfectionism are desirable because provides the energy that contributes to achievements (De Vries, 2005). When individuals with mild levels of perfectionism are successful, they derive pleasure from their accomplishments.

Perfectionism becomes maladaptive when it leads to high, unrealistic goals and the belief that the person will never be good enough, no matter how much effort he or she puts in to the task. This behavior is maladaptive because the perfectionist is putting pressure on him or herself to meet their high standards. The person agonizes about past and future errors and strives to be perfect as a way to seek validation from others (Dudau, 2014). A person who is experiencing the impostor phenomenon believes that they will only replicate their success if they put themselves

under similar pressure to be perfect the next time they are faced with an achievement-related task.

In both situations, self-handicapping or over-preparing, the temporary feelings of relief are quickly replaced by discounting the positive feedback from others. The impostor cycle continues because the negative feelings of anxiety, self-doubt, and worry reappear, even in the face of positive feedback from others. The sense of accomplishment is only temporary because success is attributed to luck or hard work. Therefore, the person who is experiencing the impostor phenomenon never internalizes their success. The impostor cycle is depicted in Figure 1.

## **Hypotheses**

The first behavior associated with the impostor phenomenon is maintaining a sense of phoniness. A person who is experiencing the impostor phenomenon will prefer conspicuous products because those products will demonstrate his or her competence to others. Therefore it is hypothesized that:

**H1:** People who are experiencing the impostor phenomenon will be more likely to prefer a public, conspicuous product compared to people who are not experiencing the impostor phenomenon.

The second behavior associated with the impostor phenomenon is using charm to win others over so that the person who is experiencing the impostor phenomenon will not be detected as a fraud. People who are experiencing the impostor phenomenon will want to improve their physical appearance because they believe that other people will infer that they have other

positive qualities, such as intelligence and competence, if they have an attractive physical appearance. Therefore it is hypothesized that:

**H2:** People who are experiencing the impostor phenomenon (people who are not experiencing the impostor phenomenon) will prefer products that make them appear more likable.

Entity theorists believe that attributes are fixed and do not believe that they can change their attitudes, personality or intelligence. Incremental theorists view attitudes, personality, and intelligence as malleable. Incremental theorists respond to setbacks and challenges by engaging in behaviors that allow them to achieve their goals. Therefore it is hypothesized that:

**H3:** The use of charm to win others over will be moderated by implicit self theory.

Incremental theorists who are experiencing the impostor phenomenon will be more likely to select products that will allow them to use charm to win others over compared to entity theorists. The effect will be reversed for people who are not experiencing the impostor phenomenon.

The final two behaviors that are common when experiencing the impostor phenomenon are avoiding success due to the fear of rejection or failure and over-preparing by being diligent and working hard. These two behaviors also correspond to the third step of the impostor cycle- either self-handicapping and attributing accomplishments to luck or over-preparing and

attributing accomplishments to working harder than anyone else needed to. Therefore it is hypothesized that:

**H4:** Self-handicapping and over-preparing will mediate the amount people who are experiencing the impostor phenomenon are willing to pay for products. People who are more likely to self-handicap will be willing to pay less than people who are more likely to over-prepare.

### **Overview of Studies**

We support our hypotheses with a series of eight studies, including one pretest. Study 1a details the process of creating an effective manipulation for the impostor phenomenon. Study 1b rules out alternative constructs, other than the impostor phenomenon, that could explain the results of the remaining studies.

Studies 2 through 5 examine how the four behaviors associated with experiencing the impostor phenomenon influence consumption decisions. The pretest establishes that impression management concerns explain the need to maintain a sense of phoniness and the use of charm to win others over. Study 2 examines how impostors strive to maintain a sense of phoniness. The results of this study show that when an individual is experiencing the impostor phenomenon they are more likely to prefer a product that is consumed in public and demonstrates that they are competent. Study 3 shows that people experiencing the impostor phenomenon use charm to win others over. When a person is experiencing the impostor phenomenon he or she is more likely to prefer a product that covers up perceived physical imperfections. People experiencing the impostor phenomenon prefer products that improve their physical appearance because they

believe that others will view them as more likeable if they look better, and they will be less likely to be seen as a fraud. Study 4 examines the same behavior as study 3 (using charm to win others over) and introduces implicit theory orientation. The results of this study show that incremental theorists who are experiencing the impostor phenomenon are more likely to take action to hide their perceived physical imperfections in order to appear more likable and win others over.

The final study continues to examine the common behaviors of people experiencing the impostor phenomenon by using the impostor cycle to explain consumption decisions. Study 5a was conducted to show that after experiencing an achievement-related task (step 1 of the impostor cycle), individuals who are experiencing the impostor phenomenon are more likely to experience negative emotions such as anxiety, self-doubt, and worry (step 2 of the impostor cycle). Study 5b examines the final two behaviors that are common in people who are experiencing the impostor phenomenon, avoiding success due to the fear of rejection or failure, and diligence and hard work. These two behaviors can be seen in the third step of the impostor cycle. People respond to the negative emotions from experiencing the impostor phenomenon by either self-handicapping (avoiding success) or by over-preparing and being a perfectionist (diligence and hard work). The results of study 5b show that people who are experiencing the impostor phenomenon who are also self-handicapping are willing to pay less for a product compared to people who are experiencing the impostor phenomenon and over preparing. Those who self-handicap attribute their success to luck and those who over prepare attribute their success to their hard work. A summary of the studies can be seen in Table 1 and a conceptual overview of the studies is displayed in Figure 2.

## Study 1a

The purpose of study 1a was to develop and test a manipulation that would create the feeling of being an impostor.

### *Methods*

Fifty-one participants completed this study on Amazon's Mechanical Turk for a monetary reward (49% male;  $M_{\text{age}} = 33.50$  years). Participants were randomly assigned to the impostor condition or the neutral condition.

Participants in the impostor condition read the following statement: "Think about a time that sticks out in your memory in which you felt that you were **less intelligent, less competent, or less capable** than other people perceived you to be. Maybe someone complimented your abilities in some particular area or commented about your accomplishments, but **instead of feeling positive about those comments, you might have felt like a "phony"**. Perhaps you felt **inadequate** or had a fear that others would "**find you out**" and think that **you aren't as capable as they originally thought**". Participants in the neutral condition read the following statement: "Think about a time that sticks out in your memory in which you felt that you were **intelligent, competent, or capable**. Maybe someone complimented your abilities in some particular area or commented about your accomplishments. As a result of the comments you felt **positive**. Perhaps you felt that others saw you as **accomplished** or successful and thought that **you are as capable as they originally thought**".

Next, all participants were given the following instructions: "Describe in detail the situation and experience that you just thought about. Include the following in your description: How long ago the experience occurred, the setting in which it occurred (for example: at a job, academic setting, extracurricular club, etc.), events that led up to the event". Participants were

also asked to describe in detail how other people viewed their abilities, competence, and intelligence in the situation that they wrote about. All participants were required to write a minimum of 100 characters when answering each question to ensure that they successfully completed the manipulation.

Next, all participants completed the Clance Impostor Phenomenon Scale (Clance 1985), the Leary Impostor Scale (Leary, Patton, Orlando, & Funk 2000), and the PANAS scale (Watson, Clark & Tellegen 1988). The items for these three scales can be seen in Appendixes A-C. Finally, participants were asked to provide demographic information.

### *Results and Discussion*

Participants in the impostor condition scored significantly higher on both the Clance Impostor Phenomenon Scale (1 = Not at all true, 5 = Very true;  $M_{\text{impostor}} = 3.25$ ,  $M_{\text{neutral}} = 2.37$ ;  $F(1,49) = 10.30$ ,  $p < .01$ ;  $\alpha = .95$ ) and the Leary Impostor Scale (1 = Not at all characteristic of me, 5 = Extremely characteristic of me;  $M_{\text{impostor}} = 2.89$ ,  $M_{\text{neutral}} = 1.55$ ;  $F(1,49) = 36.32$ ,  $p < .01$ ;  $\alpha = .95$ ).

The 25-question PANAS scale was factor analyzed used a principal component analysis with a varimax rotation. The analysis yielded four factors that explained a total of 74.836% of the variance for the entire set of variables. Factor 1 was labeled negative emotions and explained 29.653% of the variance. Factor 2 was labeled conscientiousness and explained 25.803% of the variance. Factor 3 was labeled guilt and explained 12.924% of the variance. Factor 4 was labeled hostile and explained 6.456% of the variance. The only factor that differed between the two conditions was factor 2- conscientiousness (1 = Very slightly or not at all, 5 = Extremely;  $M_{\text{impostor}} = 2.39$ ,  $M_{\text{neutral}} = 3.36$ ;  $F(1,49) = 13.592$ ,  $p < .01$ ). This result is consisted with previous

research that has shown that high conscientiousness is negatively correlated with feeling like an impostor (Vergauwe 2014).

This study shows that providing information about feeling like an impostor and having participants write about their personal experience with the impostor phenomenon is a successful manipulation.

### **Study 1b**

The purpose of study 1b was to rule out alternative explanations and to demonstrate that the impostor phenomenon is the construct that we are measuring and manipulating. We rule out power, social desirability, and self-efficacy as alternative explanations. We want to rule out two different ways of viewing power (Anderson et al, 2012). The first way is viewing power as having control over resources, such as money, information, and decision-making ability. The second way is viewing power as a psychological state, where power is a person's capacity to influence others. Social desirability is the need to obtain approval from others by behaving in a way that is considered culturally appropriate and acceptable (Crowne & Marlowe, 1960). Self-efficacy is a person's judgment and belief's about his or her capability to have the cognitive and behavioral ability to deal with a situation (Bandura, 1982).

### *Methods*

One hundred six participants completed this study on Amazon's Mechanical Turk for \$0.20 (32.7% male;  $M_{\text{age}} = 34.23$  years). Participants were randomly assigned to the impostor condition or the neutral condition. Participants in the impostor condition completed the impostor phenomenon manipulation that was developed in Study 1a; they were given a description of the impostor phenomenon and were asked to write about a situation where they felt like an impostor. Participants in the neutral condition were asked to write about a recent trip to the grocery store.



All participants were asked to write about how they acted and felt in the situation they wrote about.

Participants were asked to continue thinking about the situation they wrote about as they completed the Leary impostor scale (Leary et al., 2000), the Clance impostor scale (Clance, 1985), a power scale (Anderson et al., 2012), a social desirability scale (Crowne & Marlowe, 1960) and a self-efficacy scale (Chen et al., 2001). After completing the scales participants answered demographic questions.

### *Results*

The results of the Leary impostor scale (1 = Not at all characteristic of me, 5 = Extremely characteristic of me;  $M_{\text{impostor}} = 2.39$ ,  $M_{\text{neutral}} = 1.72$ ;  $F(1, 105) = 12.290$ ,  $p < .01$ ;  $\alpha = .92$ ) and the Clance impostor scale (1 = Not at all true, 5 = Very true;  $M_{\text{impostor}} = 3.13$ ,  $M_{\text{neutral}} = 2.66$ ;  $F(1, 105) = 8.759$ ,  $p < .01$ ;  $\alpha = .91$ ) confirmed that participants in the impostor condition felt more like an impostor compared to participants in the neutral condition.

Next we analyzed the results of the power (Anderson et al., 2012), social desirability (Crowne & Marlowe, 1960), and self-efficacy (Chen et al., 2001) scales to confirm that those constructs were not responsible for the differences between the impostor and neutral conditions. There were no significant differences between the impostor and neutral conditions for power ( $M_{\text{impostor}} = 3.74$ ,  $M_{\text{neutral}} = 3.53$ ;  $F(1, 105) = .662$ ,  $p = .418$ ;  $\alpha = .90$ ), social desirability ( $M_{\text{impostor}} = 3.97$ ,  $M_{\text{neutral}} = 4.02$ ;  $F(1, 105) = .071$ ,  $p = .791$ ;  $\alpha = .69$ ), and self-efficacy ( $M_{\text{impostor}} = 5.38$ ,  $M_{\text{neutral}} = 5.40$ ;  $F(1, 105) = .006$ ,  $p = .938$ ;  $\alpha = .94$ ).

### *Discussion*

These results confirm that the differences between the impostor and neutral condition can be attributed to experiencing the impostor phenomenon and not to other constructs.

## **Pretest**

The purpose of this pretest was to confirm that there is a correlation between experiencing the impostor phenomenon and impression management concerns. These impression management concerns will be used to explain two of the common behaviors of people experiencing the impostor phenomenon- maintaining a sense of phoniness and using charm to win others over. Maintaining a sense of phoniness is an impression management technique to convince other people that the person experiencing the impostor phenomenon is not a fraud and using charm to win others over is an impression management technique for distracting others so they will not detect that the person experiencing the impostor phenomenon is a fraud.

## *Methods*

One hundred seventy eight participants completed this study for course credit or monetary compensation. Participants were from both the Baruch marketing subject pool and Amazon's Mechanical Turk (43.3% male;  $M_{age} = 29.92$  years). Participants completed the Leary Impostor Scale (Leary et al. 2000) and Bolino and Turley's (1999) impression management scale. Finally, participants answered demographic questions.

## *Results and Discussion*

The eight-question impression management scale ( $\alpha = .89$ ) was factor analyzed using a principal component analysis with a varimax rotation. The analysis yielded two factors that explained a total of 75.539% of the variance for the entire set of variables. Factor 1 was self-promotion and explained 40.040% of the variance. Factor 2 was ingratiation and explained 35.499% of the variance. The results of the factor analysis confirm that the impression management scale can be used to represent both self-promotion and ingratiation impression management goals.

The Leary Impostor Scale ( $\alpha = .94$ ) was significantly correlated with the total impression management scale  $r(176) = .242, p < .01$ , the self-promotion impression management factor  $r(176) = .203, p < .01$ , and the ingratiation impression management factor  $r(176) = .224, p < .01$ . These results confirm our theory that experiencing the impostor phenomenon is positively correlated with impression management concerns. People experiencing the impostor phenomenon have both self-promotion and ingratiation impression management goals. The self-promotion goal is related to the behavior of maintaining a sense of phoniness, which will be examined in study 2, and the ingratiation goal is related to the behavior of using charm to win others over, which will be examined in studies 3 and 4.

## **Study 2**

The purpose of study 2 is to test hypothesis 1, which predicts that people who are experiencing the impostor phenomenon will choose a conspicuous (public) product to maintain a sense of phoniness. This study also examines the first behavior that is common among people experiencing the impostor phenomenon, maintaining a sense of phoniness, by demonstrating that the choice of products of public or private consumption changes depending on whether or not a person is experiencing the impostor phenomenon. Individuals who are experiencing the impostor phenomenon are more likely to select a product that will be seen in public. Conspicuous consumption (in this case preferring a product that is used in public) serves a signaling purpose and allows the person who is experiencing the impostor phenomenon to show others that they are competent, while maintaining a sense of phoniness.

## *Methods*

Sixty participants completed this study on Amazon's Mechanical Turk for \$0.20 (35% male;  $M_{\text{age}} = 35.35$  years). Participants were randomly assigned to the impostor condition or the neutral condition.

Participants in the impostor condition read the following statement: "People feel like an impostor when they feel like they do not deserve the success that they have achieved, even though they have evidence that they have earned their achievement. For example, a student who feels like an impostor would think that he or she got into his or her first choice college because the student felt that he or she was lucky. But in reality the student worked very hard and in fact was admitted to his or her first choice college based on effort. Think of a time when you felt like an impostor". Participants in the neutral condition were asked to think about their shopping behavior at a grocery store.

Participants in both conditions were asked to write about the situation they were told to think about in as much detail as possible. They were also asked to write about how they felt in the situation and how they acted in the situation. All participants had to write a minimum of 100 characters for each of the three questions to ensure that they properly completed the manipulation.

Next, all participants were asked to continue thinking about the situation that they wrote about as they completed the Clance Impostor Scale questions (Clance, 1985). Participants were then told that they were going to begin part 2 of the study. They read the following scenario: "The city is beginning a new initiative that is designed to increase recycling behavior. When a household increases the number of products that it recycles and reduces the number of products that are thrown away they are given the choice of two prizes. The first prize option is a t-shirt that says "I'm saving the Earth by recycling". The second prize option is a notepad that says

“I’m saving the Earth by recycling” on the cover”. Images of the t-shirt and notepad that were shown to participants can be seen in Appendix D. Participants were asked “If you were given the choice between the two products described above, which would you choose?” (1 = Definitely prefer the t-shirt, 7 = Definitely prefer the notepad). Participants then completed the Leary Impostor Scale (Leary et al., 2000) and answered demographic questions.

### *Results*

The manipulation check (the Leary Impostor Scale, 1 = Not at all characteristic of me; 5 = Extremely characteristic of me) confirmed that participants in the impostor condition felt more like an impostor compared to participants in the neutral condition ( $M_{\text{impostor}} = 2.20$ ,  $M_{\text{neutral}} = 1.58$ ;  $F(1, 59) = 4.939$ ,  $p < .03$ ;  $\alpha = .97$ ). Additional questions related to the impostor phenomenon confirmed differences between participants in the impostor condition and participants in the neutral condition. Participants in the impostor condition were less likely to believe that they lived up to the expectations they had for themselves ( $M_{\text{impostor}} = 2.70$ ,  $M_{\text{neutral}} = 1.77$ ;  $F(1, 59) = 13.142$ ,  $p < .01$ ), less likely to live up to the expectations that others had for them ( $M_{\text{impostor}} = 2.53$ ,  $M_{\text{neutral}} = 1.90$ ;  $F(1, 59) = 6.689$ ,  $p < .01$ ), less likely to feel like they did their best ( $M_{\text{impostor}} = 2.33$ ,  $M_{\text{neutral}} = 1.73$ ;  $F(1, 59) = 4.853$ ,  $p < .03$ ), and more likely to doubt their abilities ( $M_{\text{impostor}} = 2.60$ ,  $M_{\text{neutral}} = 4.13$ ;  $F(1, 59) = 26.680$ ,  $p < .01$ ).

The dependent variable was whether the participants preferred the public product (the t-shirt) or the private product (the notepad). Participants in the impostor condition were more likely to prefer the t-shirt, which was the public choice ( $M_{\text{impostor}} = 3.27$ ) and participants in the neutral condition were more likely to choose notepad, which was the private choice ( $M_{\text{neutral}} = 4.50$ ;  $F = 3.97$ ,  $p < .05$ ).

### *Discussion*

This study supports H1- people who are experiencing the impostor phenomenon are more likely to choose a conspicuous public product in an attempt to maintain a sense of phoniness. These results demonstrate that when an individual is experiencing the impostor phenomenon they are more likely to pick a product that will publically exhibit their success and competence, even if they have not internalized their success. A common behavior of people experiencing the impostor phenomenon is that they strive to maintain a sense of phoniness. This means that they prefer products that display competence and achievement, even though they have not internalized their success. The choice of a public product signals to others that the person experiencing the impostor phenomenon is competent and that he or she deserved his or her success. Signaling competence to others is important because people who are experiencing the impostor phenomenon are afraid that other people will detect that they are a fraud. The person experiencing the impostor phenomenon prefers a conspicuous product that allows him or her to maintain a sense of phoniness and to create the impression to others that they are competent. This in turn allows them to feel that other people will not detect that they are a fraud.

### **Study 3**

The purpose of study 3 was to test H2, which predicts that people who are experiencing the impostor phenomenon will choose a product that covers up perceived imperfections because they want to use charm to win others over. This study also examines the next behavior that is commonly exhibited by people who are experiencing the impostor phenomenon- using charm to win others over This study shows that when impostors fail to internalize their success they will attempt to cover up perceived imperfections with a product that is visible to others, in an attempt to appear likable to others.

### *Methods*

One hundred three participants completed this study in the Baruch College marketing subject pool for course credit (58.8% men;  $M_{\text{age}} = 21.65$  years). The procedure for this study was very similar to the procedure for Study 2. Participants were randomly assigned to either the impostor or neutral condition and completed the same manipulation that was used in Study 1 as well as the Clance Impostor Phenomenon Scale (Clance 1985).

Participants were then told that a new cosmetics store recently opened and they are offering a choice of a free gift of equal value to all new customers. Participants read the following: “Choice 1: A tinted sunscreen that offers complete protection from the sun. Users of the tinted sunscreen give it high reviews because many people noticed differences in their skin tone and complexion due to the fact that the sunscreen was tinted to match their skin tone and cover up their skin’s imperfections. Choice 2: A clear sunscreen that offers complete protection from the sun. Users of the sunscreen give it high reviews because no one else noticed that they were wearing the sunscreen”. Participants were then asked to rate which choice they preferred (1 = Definitely prefer choice 1: The tinted sunscreen, 7 = Definitely prefer choice 2: the clear sunscreen). Participants then completed a series of manipulation checks, the Leary Impostor Scale (Leary et al., 2000), and answered demographic questions.

### *Results*

Participants answered a series of questions to confirm that one product choice was not more difficult to evaluate than the other. When participants were experiencing the impostor phenomenon or were in the neutral condition. Participants were asked “How easy was it to make your product choice?” ( $M_{\text{impostor}} = 2.10$ ,  $M_{\text{neutral}} = 2.08$ ;  $F(1,102) = .008$ ,  $p = .93$ ); “How easy was it to evaluate the gift of sunscreen?” ( $M_{\text{impostor}} = 2.81$ ,  $M_{\text{neutral}} = 3.02$ ;  $F(1,102) = .732$ ,  $p = .39$ ); and “How much effort did it take to evaluate the gift of sunscreen?” ( $M_{\text{impostor}} = 2.23$ ,  $M_{\text{neutral}} =$

2.22;  $F(1,102) = .004, p = .95$ ). These results show that one product choice was not perceived as better than the other product choice. The impostor manipulation check was successful, participants in the impostor condition felt more like an impostor compared to participants in the neutral condition ( $M_{\text{impostor}} = 2.42, M_{\text{neutral}} = 1.79; F(1,102) = 13.317, p < .01; \alpha = .90$ ).

The dependent variable was how participants rated their preference for a product that covered up their perceived imperfections. Participants in the impostor condition were more likely to choose the product that covered up their imperfections (the tinted sunscreen) compared to participants in the neutral condition ( $M_{\text{impostor}} = 3.60, M_{\text{neutral}} = 4.49; F(1,102) = 3.186, p = .078$ ).

### *Discussion*

This study supports H2- people experiencing the impostor phenomenon will be more likely to prefer a product that allows him or her to use charm to win others over. The results of this study show that when an individual is experiencing the impostor phenomenon they are more likely to select a product that allows them to cover up their perceived imperfections. People experiencing the impostor phenomenon want to be well liked by other people and will attempt to use charm to win others over. This results in a preference for products that allow them to construct the specific impression that they are likable. When a person who is experiencing the impostor phenomenon prefers a product that allows them to hide their perceived flaws, they do so in order to be well liked and viewed as intelligent. The literature on the halo effect finds that a positive impression in one area can influence impressions in other areas (Nisbett & Wilson, 1977). If a person experiencing the impostor phenomenon has an attractive physical appearance then they should also expect this will lead other people to also view them as likable and intelligent. People who are experiencing the impostor phenomenon believe that if they are viewed as likable and charming, then other people will not detect them as a fraud.



## Study 4

The purpose of study 4 is to test hypothesis 3, which predicts that people who are experiencing the impostor phenomenon, who are also entity theorists, will be less likely to use charm to win others other than incremental theorists. This study also continues to examine the behavior of using charm to win others over. This study also introduces implicit theory as a moderator. Incremental theorists believe that personality traits and intelligence are malleable while entity theorists believe that personality traits and intelligence are fixed (Dweck, Chiu & Hong 1995). Incremental theorists who are experiencing the impostor phenomenon will prefer products cover up perceived imperfections because they believe that these products will allow them to use charm to win others over. Entity theorists who are experiencing the impostor phenomenon will prefer products that do not cover up perceived imperfections because they believe they truly are a fraud and they do not have the ability to successfully win others over and convince others that they are competent and capable.

### *Methods*

Ninety-one participants (29.3% men,  $M_{\text{age}} = 37.35$  years) from Amazon's Mechanical Turk participated for \$0.25. This study included one manipulated factor (impostor vs. neutral) and one measured factor (implicit theory). Participants were randomly assigned to an impostor or neutral condition and completed the same impostor phenomenon manipulation that was used in studies 2 and 3. Participants were then given the same cosmetics store scenario from study 3 and rated their preference of the tinted or clear sunscreen (1 = Definitely prefer choice 1: The tinted sunscreen, 7 = Definitely prefer choice 2: the clear sunscreen). Next participants completed an 8-item implicit theory measure (Levy & Dweck, 1997). The items from this scale are shown in Appendix E. Examples of items from the implicit theory measure include "The kid of person

someone is, is something basic about them and it can't be changed very much" and "People can change even their most basic qualities". Participants then completed a series of manipulation checks, the Leary Impostor Scale (Leary et al., 2000), and answered demographic questions.

### *Results*

A reliability analysis was conducted for the Leary Impostor Scale ( $\alpha = .96$ ) and implicit theory scale ( $\alpha = .96$ ). We analyzed the results of our impostor phenomenon manipulation check. Participants in the impostor condition scored higher on the impostor scale compared to participants in the neutral condition ( $M_{\text{impostor}} = 2.67$ ,  $M_{\text{neutral}} = 1.85$ ;  $F(1,90) = 13.031$ ,  $p < .01$ ). This confirms that the impostor phenomenon manipulation was effective and participants in the impostor condition felt more like an impostor compared to participants in the neutral condition.

Next, we wanted to ensure that participants did not see differences in the product choices and did not view one choice as more difficult to evaluate than the other. Participants did not see a difference in product visibility ( $M_{\text{impostor}} = 3.05$ ,  $M_{\text{neutral}} = 2.80$ ;  $F(1,90) = .428$ ,  $p = .52$ ); how good they felt about themselves when using the product ( $M_{\text{impostor}} = 4.98$ ,  $M_{\text{neutral}} = 4.76$ ;  $F(1,90) = .575$ ,  $p = .45$ ); how easy it was to evaluate the products ( $M_{\text{impostor}} = 2.61$ ,  $M_{\text{neutral}} = 2.66$ ;  $F(1,90) = .024$ ,  $p = .88$ ); how much effort it took to evaluate the products ( $M_{\text{impostor}} = 2.32$ ,  $M_{\text{neutral}} = 2.24$ ;  $F(1,90) = .106$ ,  $p = .75$ ); whether they thought of themselves or others when they evaluated the sunscreen ( $M_{\text{impostor}} = 2.59$ ,  $M_{\text{neutral}} = 3.36$ ;  $F(1,90) = .532$ ,  $p = .47$ ); how often they would use the product ( $M_{\text{impostor}} = 2.61$ ,  $M_{\text{neutral}} = 2.84$ ;  $F(1,90) = .897$ ,  $p = .35$ ); ( $M_{\text{impostor}} = 2.67$ ,  $M_{\text{neutral}} = 1.85$ ;  $F(1,90) = 13.734$ ,  $p < .01$ ); how fashion conscious they are ( $M_{\text{impostor}} = 3.63$ ,  $M_{\text{neutral}} = 3.58$ ;  $F(1,90) = .019$ ,  $p = .89$ ); or how skin conscious they are ( $M_{\text{impostor}} = 5.20$ ,  $M_{\text{neutral}} = 4.52$ ;  $F(1,90) = 3.585$ ,  $p < .07$ ). These results confirm that experiencing the impostor phenomenon was the only difference between the conditions.

We used PROCESS model 1 (Hayes, 2013) with 10,000 bootstrapping samples to test whether implicit theory moderated the effect of experiencing the impostor phenomenon on the choice of a product that hides imperfections (tinted or clear sunscreen). The impostor  $\times$  implicit theory interaction was significant ( $F(1,90) = 5.56, p < .02$ ).

Our proposed moderator (implicit theory) was a continuous variable so we decomposed the interaction using Johnson-Neyman points (Johnson 1936). Our analysis revealed that experiencing the impostor phenomenon influenced product choice when implicit theory was low ( $M_{it} = 1.56$ ) (7.69% below this value, effect = 1.5781) and high ( $M_{it} = 6.48$ ) (95.6% below this value, effect = -2.0967). Low scores on the implicit theory measure (Levy & Dweck 1997) indicated an incremental theory and high scores on the implicit theory measure indicate an entity theory. Figure 3 displays these results.

We ran a spotlight analysis at one standard deviation above and below the mean (Krishna, 2016). A spotlight analysis at one standard deviation ( $M_{it} = 2.00$ ) below the mean of implicit theory showed a marginally significant difference such that low implicit theory (incremental theorists) were more likely to prefer the tinted sunscreen when they were in the impostor condition versus when they were in the neutral condition (effect = 1.24, SE = .69,  $t = 1.81, p < .07$ ). A spot light analysis at one standard deviation ( $M_{it} = 5.12$ ) above the mean of implicit theory was insignificant (effect = -1.08, SE = .70,  $t = -1.54, p = .13$ ).

### *Discussion*

This study supports H3- people who are experiencing the impostor phenomenon who are also entity theorists will be less likely to prefer products that allow them to use charm to win others over compared to incremental theorists. The results of this study show that incremental theorists who are experiencing the impostor phenomenon are more likely to prefer the tinted

sunscreen and incremental theorists who are in the neutral condition are more likely to prefer the clear sunscreen. This effect is reversed for entity theorists. Entity theorists who are experiencing the impostor phenomenon are more likely to prefer the clear sunscreen compared to entity theorists in the neutral condition.

People who are experiencing the impostor phenomenon who are also incremental theorists are more likely to prefer the tinted sunscreen because they view that choice as a way use charm to win others over. The goal of avoiding detection as a fraud by appearing likable drives the incremental theorist's actions and product preferences.

Entity theorists who are experiencing the impostor phenomenon are more likely to prefer the clear sunscreen because they do not believe that they can change the impressions that other people have of them. Both incremental and entity theorists who are experiencing the impostor phenomenon fail to internalize their success, however only incremental theorists take action to achieve their goal of avoiding detection as a fraud.

### **Study 5a**

The impostor cycle is an important characteristic of the impostor phenomenon (Clance, 1985). The impostor cycle begins with a task that causes an individual to experience the impostor phenomenon. This results in feelings of anxiety, self-doubt, and worry. The purpose of this study is to demonstrate that individuals experiencing the impostor phenomenon experience negative emotions such as anxiety, self-doubt, and worry.

#### *Methods*

One hundred eleven Baruch College undergraduates completed this study for course credit (59.5% male;  $M_{\text{age}} = 21.93$  years). Participants completed the same impostor phenomenon manipulation that was used in previous studies. Participants then answered a series of

manipulation check questions and then completed the impostor phenomenon measure (1 = Not at all characteristic of me; 5 = Extremely characteristic of me). Leary et. al., 2000) and questions that assessed their negative emotions. Participants were asked to indicated how anxious, upset, distressed, and secretive they felt (1 = very slightly, 5 = extremely). They were also asked how confident they felt (1 = Not at all, 7 = Extremely) and if they were experiencing self-doubt (1= Definitely yes, 5 = Definitely no). Finally, participants completed demographic questions.

### *Results*

Participants in the impostor condition scored higher on the Leary impostor scale (2000) compared to participants in the neutral condition  $M_{\text{impostor}} = 2.30$ ,  $M_{\text{neutral}} = 2.10$ ;  $F(1,110) = 3.698$ ,  $p < .056$ ). Participants in the impostor condition were more anxious ( $M_{\text{impostor}} = 2.62$ ,  $M_{\text{neutral}} = 1.61$ ;  $F(1,110) = 20.032$ ,  $p < .01$ ), were more upset ( $M_{\text{impostor}} = 2.20$ ,  $M_{\text{neutral}} = 1.66$ ;  $F(1,110) = 5.32$ ,  $p < .02$ ), more distressed ( $M_{\text{impostor}} = 2.67$ ,  $M_{\text{neutral}} = 1.96$ ;  $F(1,110) = 10.394$ ,  $p < .01$ ), more secretive ( $M_{\text{impostor}} = 2.05$ ,  $M_{\text{neutral}} = 1.34$ ;  $F(1,110) = 13.181$ ,  $p < .01$ ), less confident ( $M_{\text{impostor}} = 4.51$ ,  $M_{\text{neutral}} = 5.16$ ;  $F(1,110) = 4.565$ ,  $p < .04$ ), and had more self-doubts ( $M_{\text{impostor}} = 2.78$ ,  $M_{\text{neutral}} = 3.68$ ;  $F(1,110) = 14.867$ ,  $p < .01$ ) than participants in the neutral condition.

### *Discussion*

This study demonstrates that after the progression through the impostor cycle. The previous studies focused on the first stage of the cycle, achievement-related tasks. In this study participants were asked to write about a situation where they experienced the impostor phenomenon- writing about and remembering the achievement related task is the first part of the impostor cycle. The second part of the impostor cycle is experiencing negative emotions. This study showed that participants who experienced the impostor phenomenon are more likely to feel

negative emotions such as anxiety, distress. These participants also feel more upset, more secretive, and had more self-doubts than participants in the neutral condition. The next step in the impostor cycle is either over-preparing and acting like a perfectionist or self-handicapping- this step will be examined in study 5b.

### **Study 5b**

Study 5b tests hypothesis 4, which predicts that people who are experiencing the impostor phenomenon will make different consumption choices when they self-handicap and over-prepare. This study also continues to demonstrate how the behaviors associated with experiencing the impostor phenomenon influence consumption choices. This study focuses on the final two behaviors that occur while experiencing the impostor phenomenon. The first behavior is avoiding success due to the fear of rejection or failure and the second behavior is engaging in diligence and hard work. These two behaviors are part of the third step of the impostor cycle. During the third step of the impostor cycle individuals experiencing the impostor phenomenon respond to the negative feelings from step two of the impostor cycle by either over-preparing or self-handicapping. The purpose of study 5b was to demonstrate that people experiencing the impostor phenomenon are willing to pay different amounts for a product depending on whether they are more likely to self-handicap or over-prepare.

### *Methods*

Two hundred twenty one participants completed this study on Amazon's Mechanical Turk for \$0.20 (35.1% male;  $M_{age} = 35.07$  years). All participants were given the impostor phenomenon manipulation that was used in the earlier studies. Next, all participants were asked to keep the situation that they wrote about in mind as they completed an impostor phenomenon (Leary et. al., 2000), perfectionism (Frost, 1990), and self-handicapping (Strube, 1986)

measures. After completing the measures, participants were given the sample cosmetics store scenario that was used in studies 2 and 3. Participants selected which choice they preferred (1 = Definitely prefer the tinted sunscreen, 7 = Definitely prefer the clear sunscreen) and then indicated their satisfaction, purchase intention, relief after making the choice, and willingness to pay. Finally, participants completed attention check and demographic questions.

### *Results*

First we used analyzed the responses from the impostor phenomenon scale (1 = Not at all characteristic of me, 5 = Extremely characteristic of me; Leary et. al., 2000). The responses were similar to the results of the previous studies that used the same impostor phenomenon manipulation ( $M_{\text{impostor}} = 2.75$ ;  $SD = 1.12$ ;  $\alpha = .94$ ).

Next we analyzed the results of the perfectionism scale ( $\alpha = .93$ ; Frost, 1990). The Frost Multidimensional Perfectionism scale is designed to measure the six core dimensions of perfectionism (Stober, 2000). The perfectionism scale can be broken down into six subscales that measure each of the core dimensions. We selected the items from the personal standards subscale ( $\alpha = .86$ ) to use in our analysis because it constitutes a portion of the third step of the impostor cycle. The seven items from the personal standards subscale can be seen in F.

We ran a mediation analysis (Hayes 2013; model 4) using the bootstrap procedure with 10,000 resamples to examine the relationship between experiencing the impostor phenomenon, personal standards/perfectionism, and the willingness to pay for a product. The analysis revealed a significant effect of experiencing the impostor phenomenon on personal standards ( $b = .15$ ,  $SE = .07$ ,  $t = 2.20$ ,  $p < .03$ ), and a significant effect of personal standards on willingness to pay ( $b = .17$ ,  $SE = .02$ ,  $t = 2.24$ ,  $p < .03$ ). More importantly, self-handicapping mediated the relationship between experiencing the impostor phenomenon and willingness to pay, with a 95% CI

excluding zero (indirect effect = .0072, SE = .02; 95% CI, .0006 to .0213). The direct effect of experiencing the impostor phenomenon on willingness to pay was not significant (direct effect = .0150, SE = .02,  $t = .70$ ,  $p = .48$ ; 95% CI, -.0270 to .0570). Experiencing the impostor phenomenon had a significant positive effect through the mediator of personal standards, such that those who scored higher on the impostor phenomenon scale were willing to pay more for their preferred product choice than those who scored lower on the impostor phenomenon scale. These results can be seen in Figure 4.

We ran the same mediation analysis with product choice as a covariate to ensure that the choice that participant's preferred did not result in differences in how much they were willing to pay for the product. The mean indirect effect was positive with a 95% confidence interval excluding zero (indirect effect = .0079, SE = .01; CI, .0010 to .0215). This confirms that a participant's product choice did not influence their willingness to pay for their preferred product choice. The direct effect of experiencing the impostor phenomenon on willingness to pay was not significant when choice was included as a covariate (direct effect = .0087, SE = .02,  $t = .42$ ,  $p = .67$ ; 95% CI, -.0317 to .0490).

We then analyzed the results of the self-handicapping scale ( $\alpha = .79$ ; Strube, 1986). Our goal was to identify the scale items that constituted the third step of the impostor cycle. Therefore, we decided to focus on one item from the scale "I made excuses when I did something wrong" (1 = Strongly disagree, 7 = Strongly agree;  $M = 3.44$ ,  $SD = 1.79$ ).

Next, we ran a mediation analysis (Hayes, 2013; model 4) using the bootstrap procedure with 10,000 resamples to examine the relationship between experiencing the impostor phenomenon, self-handicapping, and the willingness to pay for the product. The analysis revealed a significant effect of experiencing the impostor phenomenon on self-handicapping ( $b =$



.18,  $SE = .10$ ,  $t = 2.70$ ,  $p < .01$ ), and a significant effect of self-handicapping on willingness to pay ( $b = .20$ ,  $SE = .0$ ,  $t = -2.76$ ,  $p < .01$ ). More importantly, personal standards mediated the relationship between experiencing the impostor phenomenon and willingness to pay, with a 95% CI excluding zero (indirect effect =  $-.0108$ ,  $SE = .01$ ; 95% CI,  $-.0306$  to  $-.0016$ ). The direct effect of experiencing the impostor phenomenon on willingness to pay was not significant (direct effect =  $.0329$ ,  $SE = .02$ ,  $t = 1.55$ ,  $p = .12$ ; 95% CI,  $-.0090$  to  $-.0749$ ). Experiencing the impostor phenomenon had a significant negative effect through the mediator of self-handicapping, such that those who scored higher on the impostor phenomenon scale were willing to pay less for their preferred product choice than those who scored lower on the impostor phenomenon scale. These results can be seen in Figure 5.

We ran the same mediation analysis with product choice as a covariate to ensure that the choice that participant's preferred did not result in differences in how much they were willing to pay for the product. The mean indirect effect was significant with a 95% confidence interval excluding zero (indirect effect =  $-.0100$ ,  $SE = .01$ ; CI,  $-.0307$  to  $-.0011$ ). This confirms that a participant's product choice did not influence their willingness to pay for their preferred product choice. The direct effect of experiencing the impostor phenomenon on willingness to pay was not significant when choice was included as a covariate (direct effect =  $.0265$ ,  $SE = .02$ ,  $t = 1.29$ ,  $p = .20$ ; 95% CI,  $-.0140$  to  $.0671$ ).

### *Discussion*

This study supports H4- people experiencing the impostor phenomenon will make different consumption decisions based on whether they self-handicap or over-prepare. These results confirm the hypothesis that individuals taking different paths in the impostor cycle will make the same product choice, but they will have a different willingness to pay. There was a

significant correlation between high scores on the impostor scale and heightened self-handicapping and perfectionist standards. However, individuals who were high on self-handicapping and high perfectionists were willing to pay different amounts for the product that they preferred. Individuals who scored higher on the self-handicapping scale had a lower willingness to pay than individuals who scored higher on the perfectionism scale.

The impostor cycle continues because of how people experiencing the impostor phenomenon justify their success after their feelings of self-doubt, anxiety, and worry. Individuals who self-handicap after experiencing the impostor phenomenon will attribute their success to luck; they view success as accomplishing a task and also when other people do not detect them as a fraud. They procrastinate and put in less effort so they have an excuse prepared if they fail or are detected as a fraud. Individuals who have high personal standards will over-prepare. After experiencing the impostor phenomenon these individuals will claim that they were successful and others did not detect them as a fraud because they spent more time and effort than anyone else preparing. It is important to note that people who are experiencing the impostor phenomenon will be successful despite self-handicapping or over-preparing and they will not be detected as a fraud because they are not actual impostors. Attributing success to luck after self-handicapping or hard work after over-preparing is why the impostor cycle continues.

Individuals who self-handicap are more likely to pay less for their preferred product because they take fewer actions than those who over-prepare to succeed when they experience the impostor phenomenon and to avoid being detected as a fraud. Individuals who over-prepare will take more action to achieve their accomplishments and avoid detection as a fraud; therefore they are willing to pay more for a product that will help them avoid detection as a fraud.

## **General Discussion**

Psychological research has found that over 70% of people experience the impostor phenomenon at one time or another (Gravis 2007). Given the prevalence of this phenomenon it is necessary to study its effects on consumption behavior. In eight studies, we introduce the concept of the impostor phenomenon to the consumer behavior literature and demonstrate how experiencing the impostor phenomenon can influence consumption behavior.

In this paper we established a successful way to manipulate the impostor phenomenon. Past work has simply measured the impostor phenomenon instead of manipulating it. Establishing a way to manipulate the impostor phenomenon was crucial in order to study the impostor phenomenon experimentally.

We find that the four common behaviors that are associated with experiencing the impostor phenomenon influence consumption decisions. People who are experiencing the impostor phenomenon are more likely to prefer conspicuous products that are used in public to maintain a sense of phoniness. They are also more likely to prefer products that cover up perceived physical imperfections in an attempt to appear more likable to others who may detect them as a fraud. This effect holds for incremental theorists, but not for entity theorists. Finally, we show that consumption decisions change based on the different paths people take through the impostor cycle. People who self-handicap are willing to pay less for a product that can help them avoid detection as a fraud than people who over-prepare.

### **Theoretical Implications**

This paper contributes to research on the impostor phenomenon, conspicuous consumption, and implicit theory. Our first contribution is that we introduce the impostor phenomenon to the marketing literature. Until now the impostor phenomenon has only been studied in a psychological context and has not been examined experimentally. We contribute to

the impostor phenomenon literature by introducing it to the marketing domain and by identifying how to experimentally manipulate the feelings associated with experiencing the impostor phenomenon. We also identify how the four behaviors associated with experiencing the impostor phenomenon influence consumption behavior and how consumption behaviors change throughout the impostor cycle.

We also contribute to the conspicuous consumption literature by demonstrating how experiencing the impostor phenomenon leads individuals to prefer conspicuous products as a way to maintain a sense of phoniness and avoid detection as an impostor. Implicit theories also determine how consumption behavior changes when a person is experiencing the impostor phenomenon. This paper adds to the implicit theory literature by showing that experiencing the impostor phenomenon affects the consumption behaviors of incremental and entity theorists differently. Incremental theorists are more likely to take action to appear more charming and likable and to avoid being detected as a fraud compared to entity theorists.

### **Managerial Implications**

The studies in this paper establish that consumption behavior changes when a person is experiencing the impostor phenomenon; this is something that marketers and retailers should be aware of. There are many domains where it is more common to experience the impostor phenomenon, such as school and work settings. Retailers in these settings should be aware that many potential customers are likely experiencing the impostor phenomenon and should offer products that allow them to achieve their goals of avoiding being detected as a fraud.

There are also implications for managers, supervisors, and advisors. This work demonstrates that people who are experiencing the impostor phenomenon are likely to hide their true beliefs and ideas because they are trying to maintain a sense of phoniness to avoid being

detected as a fraud. If employees and students are hiding their true ideas because they are concerned about being detected as a fraud there are implications for the success of a firm or school. One suggestion for managers, supervisors, and advisors is to allow people to contribute ideas anonymously so that people can share their true ideas instead of ideas that are designed to help them avoid being detected as a fraud. Managers, supervisors, and advisors should also encourage people who have objectively demonstrated competence to pursue opportunities. People who are experiencing the impostor phenomenon will focus their attention on appearing likable and they may not actively pursue opportunities because they do not want to be detected as a fraud.

There are also public policy implications in this work. This work establishes that people who are experiencing the impostor phenomenon and over-preparing are more likely to pay more for products than people who self-handicap. This shows that experiencing the impostor phenomenon has impacts on people's financial decision making. Before making large purchases people who are likely to be experiencing the impostor phenomenon should be encouraged to wait some extra time before committing to the purchase. Encouraging people to procrastinate can help them avoid overpaying as a way of recovering from experiencing the impostor phenomenon.

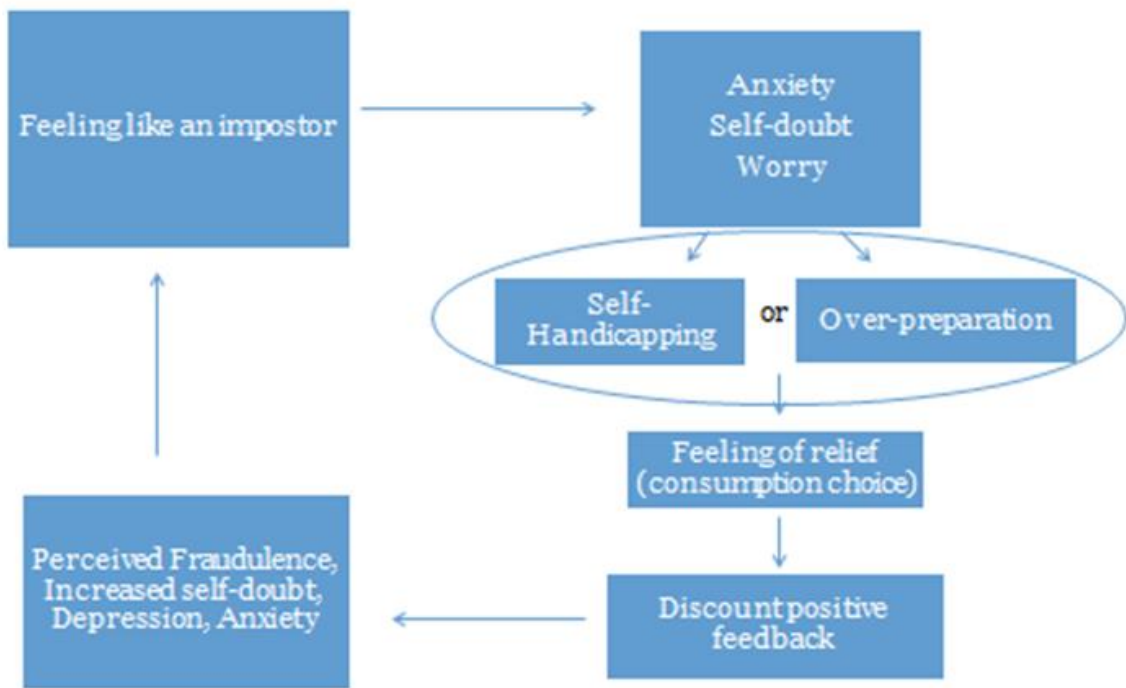
### **Future Directions**

This work demonstrates that people who are experiencing the impostor phenomenon have the desire to create and present a carefully curated version of themselves in order to avoid being detected as a fraud. We have established that the consumption behavior of people experiencing the impostor phenomenon changes based on the four common behaviors associated with the impostor phenomenon. The studies presented also show how consumption behavior changes during the first three steps of the impostor cycle. Future work will focus on the later stages of the

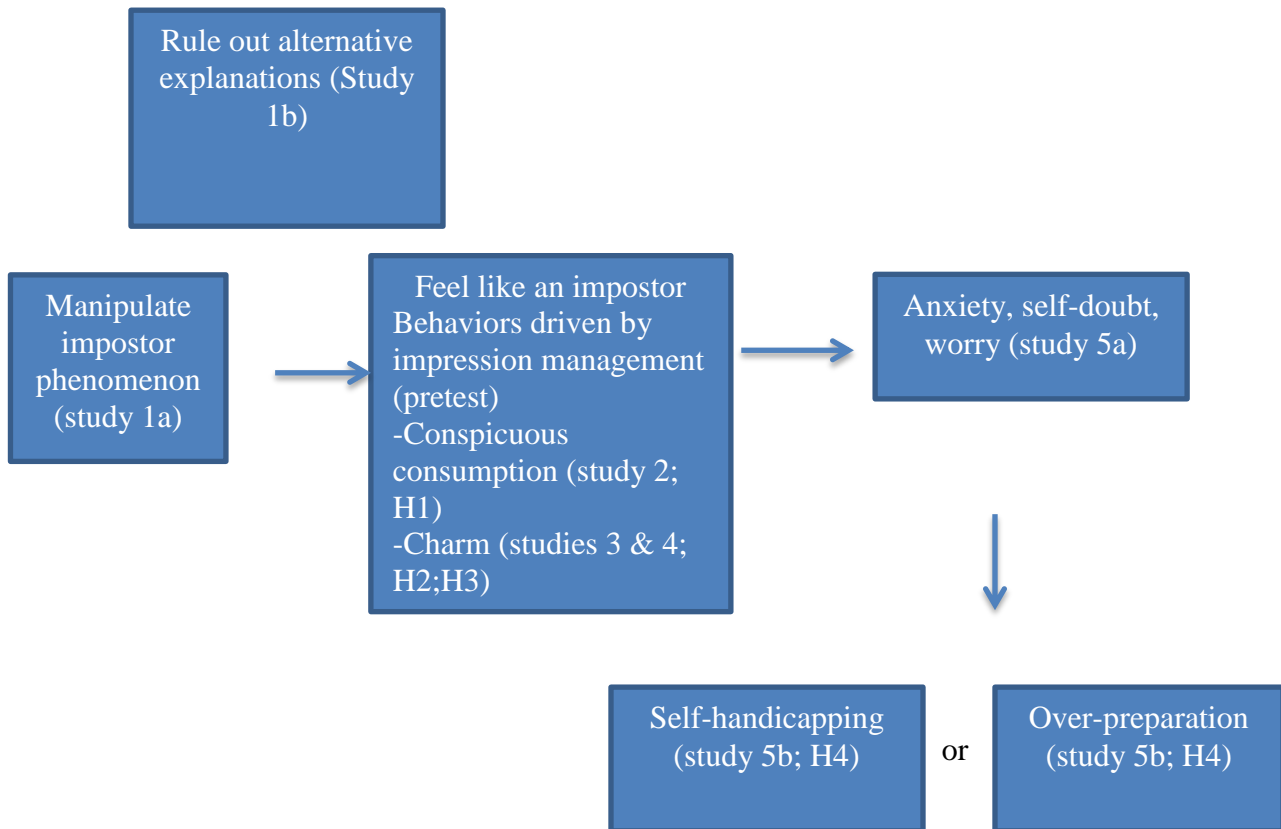
impostor cycle. Specifically, we will examine the discounting of positive feedback and feelings of fraudulence, self-doubt, and anxiety that occur after the initial feeling of relief that comes with avoiding detection as a fraud. These feelings contribute to the perpetuation of the impostor cycle.

Future work should also examine how experiencing the impostor phenomenon fits into the broader aspects of social identity. For example, people who are experiencing the impostor phenomenon should behave differently and make different consumption choices when they are focusing on themselves compared to when they are focusing on other people. Additionally, behaviors around an impostor's close friends and distant acquaintances should be different.

**Figure 1**  
The Impostor Cycle

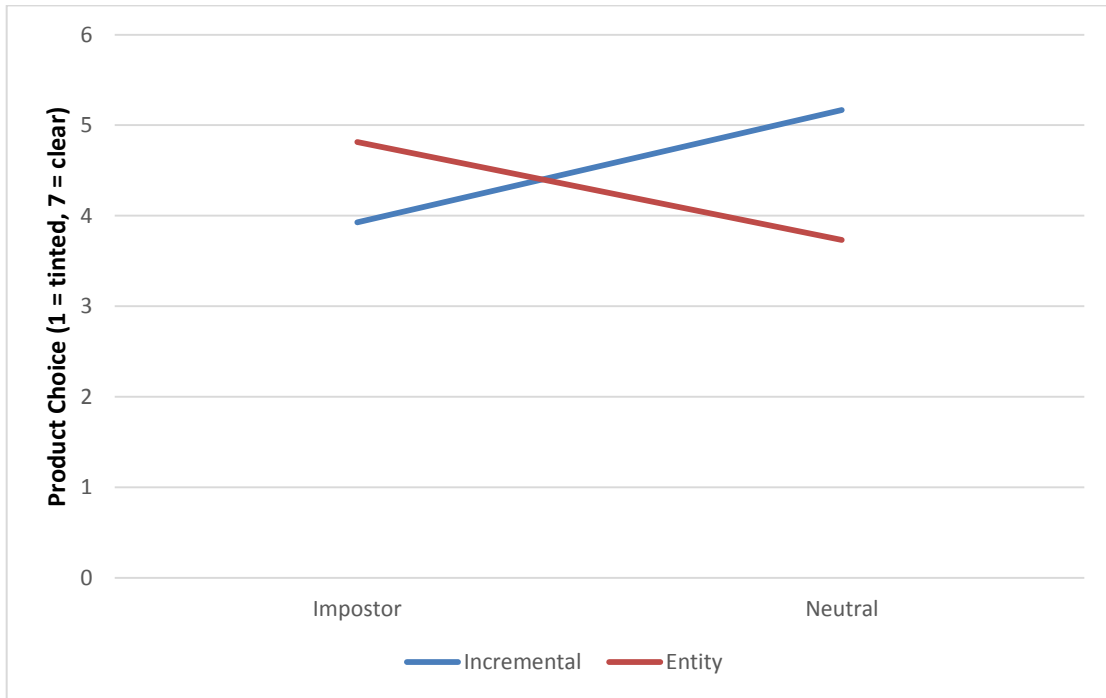


**Figure 2**  
Conceptual Overview of Studies



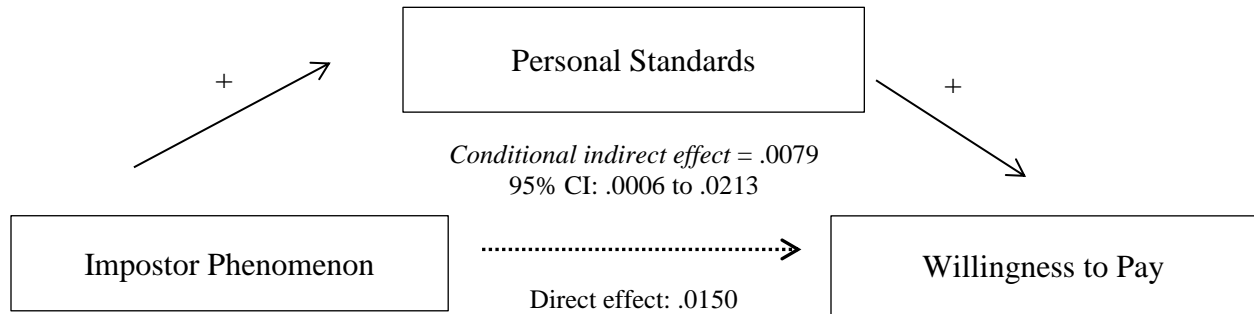


**Figure 3**  
Product Choice (Study 4)

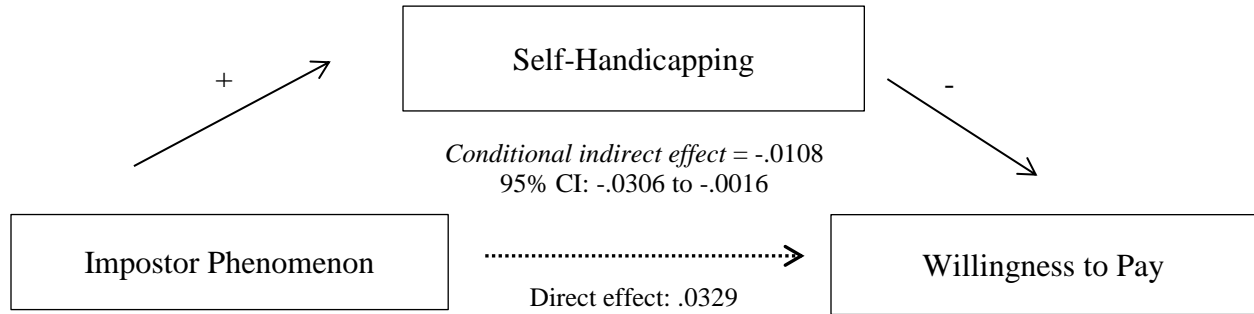


The impostor  $\times$  implicit theory interaction was significant ( $F(1,90) = 5.56, p < .02$ )

**Figure 4**  
Study 5b Mediation



**Figure 5**  
Study 5b Mediation



**Table 1**  
Overview of studies

|          | Test                         | Purpose   | Hypothesis |
|----------|------------------------------|---|------------|
| Study 1A | Main effect                  | Establish impostor phenomenon manipulation                        |            |
| Study 1B | Correlation                  | Rule out alternative explanations                                 |            |
| Pretest  | Correlation                  | Test impression management  |            |
| Study 2  | Main effect                  | Conspicuous consumption   | H1         |
| Study 3  | Main effect                  | Charm/likability  | H2         |
| Study 4  | Moderation (implicit theory) | Charm/likability with implicit theory moderator                   | H3         |
| Study 5A | Correlation                  | Impostor phenomenon and negative affect                           |            |
| Study 5B | Parallel mediation           | Self-handicapping and over-preparation serve as mediators for WTP | H4         |

## **Appendix A**

Leary Impostor Scale (Leary, M. R., Patton, K. M., Orlando, A. E., & Wagoner Funk, W. (2000)

1. Sometimes I am afraid I will be discovered for who I really am
2. I tend to feel like a phony
3. I'm afraid people important to me may find out that I'm not as capable as they think I am
4. In some situations I feel like an impostor
5. Sometimes I'm afraid others will discover how much knowledge or ability I really lack
6. In some situations I feel like a "great pretender"; that is, I'm not as genuine as others think I am
7. In some situations I act like an impostor

## Appendix B

### Clance Impostor Scale (Clance, 1985)

1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.
2. I can give the impression that I'm more competent than I really am.
3. I avoid evaluations if possible and have a dread of others evaluating me.
4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.
5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.
6. I'm afraid people important to me may find out that I'm not as capable as they think I am.
7. I tend to remember the incidents in which I have not done my best more than those times I have done my best.
8. I rarely do a product or task as well as I'd like to do it.
9. Sometimes I feel or believe that my success in life or in my job has been the result of some kind of error.
10. It's hard for me to accept compliments or praise about my intelligence or accomplishments.
11. At times, I feel my success has been due to some kind of luck.
12. I'm disappointed at times in my present accomplishments and that I should have accomplished much more.
13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack.
14. I'm often afraid that I may fail at a new assignment or undertaking even though I generally do well at what I attempt.
15. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep repeating that success.
16. If I receive a great deal of praise and recognition for something I've accomplished, I tend to discount the importance of what I've done.
17. I often compare my ability to those around me and think they may be more intelligent than I am.
18. I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well.
19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact.
20. I feel bad and discouraged if I'm not "the best" or at least "very special" in situations that involve achievement.

## **Appendix C**

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988)

1. Interested
2. Distressed
3. Excited
4. Upset
5. Strong
6. Guilty
7. Scared
8. Hostile
9. Enthusiastic
10. Proud
11. Irritable
12. Alert
13. Ashamed
14. Inspired
15. Nervous
16. Determined
17. Attentive
18. Jittery
19. Active
20. Afraid

**Appendix D**  
Study 2 product choices





**Appendix E**  
Implicit Theory Scale (Levy & Dweck, 1997)

1. The kind of person someone is, is something basic about them and it can't be changed very much.
2. People can do things differently, but the important parts of who they are can't really be changed.
3. Everyone is a certain kind of person, and there is not much that they can do to change that.
4. As much as I hate to admit it, you can't teach an old dog new tricks. People can't really change their deepest attributes.
5. Everyone, no matter who they are, can significantly change their basic characteristics.
6. People can substantially change the kind of person they are.
7. No matter what kind of person someone is, they can always change very much.
8. People can change even their most basic attributes.

## **Appendix F**

Items from the personal standards subscale (Frost, 1990)

1. If I do not set the highest standards for myself, I am likely to end up a second-rate person.
2. It is important to me that I am thoroughly competent in everything I do.
3. I set higher goals than most people.
4. I am very good at focusing my efforts on attaining a goal.
5. I have extremely high goals.
6. Other people seem to accept lower standards than I do.
7. I expect higher performance in my daily tasks than most people.

## References

- Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. *Journal of personality, 80*(2), 313-344.
- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological review, 64*(6p1), 359.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist, 37*(2), 122.
- Bolino, M. C., & Turnley, W. H. (1999). Measuring impression management in organizations: A scale development based on the Jones and Pittman taxonomy. *Organizational Research Methods, 2*(2), 187-206.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational research methods, 4*(1), 62-83.
- Chiu, C. Y., Hong, Y. Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of personality and social psychology, 73*(1), 19.
- Clance, P. R. (1985). *The impostor phenomenon: Overcoming the fear that haunts your success*. Peachtree Pub Ltd.
- Clance, P. R., Dingman, D., Reviere, S. L., & Stober, D. R. (1995). Impostor phenomenon in an interpersonal/social context: Origins and treatment. *Women & therapy, 16*(4), 79-96.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice, 15*(3), 241.
- Clance, P. R., & O'Toole, M. A. (1987). The imposter phenomenon: An internal barrier to empowerment and achievement. *Women & Therapy, 6*(3), 51-64.

- Conroy, D. E., Kaye, M. P., & Fifer, A. M. (2007). Cognitive links between fear of failure and perfectionism. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 25(4), 237-253.
- Cowman, S. E., & Ferrari, J. R. (2002). "Am I for real?" Predicting impostor tendencies from self-handicapping and affective components. *Social Behavior and Personality: an international journal*, 30(2), 119-125.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of consulting psychology*, 24(4), 349.
- de Vries, M. F. R. K. (2005). The dangers of feeling like a fake. *Harvard business review*, 83(9), 108.
- Duclos, R., Wan, E. W., & Jiang, Y. (2013). Show me the honey! Effects of social exclusion on financial risk-taking. *Journal of Consumer Research*, 40(1), 122-135.
- Dudău, D. P. (2014). The relation between perfectionism and impostor phenomenon. *Procedia-Social and Behavioral Sciences*, 127, 129-133.
- Dunning, D., Johnson, K., Ehrlinger, J., & Kruger, J. (2003). Why people fail to recognize their own incompetence. *Current directions in psychological science*, 12(3), 83-87.
- Dweck, C. (1999). *Self-Theories: Their role in motivation, personality and development*. 1999.
- Dweck, C. S., Chiu, C. Y., & Hong, Y. Y. (1995). Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological inquiry*, 6(4), 267-285.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological review*, 95(2), 256.

- Flett, G. L., Blankstein, K. R., Hewitt, P. L., & Koledin, S. (1992). Components of perfectionism and procrastination in college students. *Social Behavior and Personality: an international journal*, 20(2), 85-94.
- Gravois, J. (2007). You're Not Fooling Anyone. *Chronicle of Higher Education*, 54(11).
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: status, reputation, and conspicuous conservation. *Journal of personality and social psychology*, 98(3), 392.
- Harvey, J. C. (1982). *The impostor phenomenon and achievement: A failure to internalize success* (Doctoral dissertation, ProQuest Information & Learning).
- Hayes, Andrew F. (2013), *An Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, New York: Guilford.
- Hoang, Q. (2015). The Impostor Phenomenon: Overcoming Internalized Barriers and Recognizing Achievements. *The Vermont Connection*, 34(1), 6.
- Huang, X., Dong, P., & Mukhopadhyay, A. (2014). Proud to belong or proudly different? Lay theories determine contrasting effects of incidental pride on uniqueness seeking. *Journal of Consumer Research*, 41(3), 697-712.
- Johnson, Palmer O., and J. Neyman (1936), "Tests of Certain Linear Hypotheses and Their Application to Some Educational Problems," *Statistical Research Memoirs*, 1, 57-93.
- Kahn, A. S., & Yoder, J. D. (1989). The psychology of women and conservatism. *Psychology of Women Quarterly*, 13(4), 417-432.
- Katz, C. (1986). *If I'm so successful, why do I feel like a fake?: The impostor phenomenon*. New York: Pocket Books; Markham, Ont. Distributed in Canada by PaperJacks.

- Kim, S., & Gal, D. (2014). From Compensatory Consumption to Adaptive Consumption: The Role of Self-Acceptance in Resolving Self-Deficits. *Journal of Consumer Research*, 41(2), 526-542.
- Krishna, A. (2016). A clearer spotlight on spotlight: Understanding, conducting and reporting. *Journal of Consumer Psychology*, 26(3), 315-324.
- Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of personality and social psychology*, 77(6), 1121.
- Kolditz, T. A., & Arkin, R. M. (1982). An impression management interpretation of the self-handicapping strategy. *Journal of personality and social psychology*, 43(3), 492.
- Kolligian Jr, J., & Sternberg, R. J. (1991). Perceived Fraudulence in Young Adults: Is There an 'Imposter Syndrome'?. *Journal of personality assessment*, 56(2), 308-326.
- Langford, J., & Clance, P. R. (1993). The impostor phenomenon: recent research findings regarding dynamics, personality and family patterns and their implications for treatment. *Psychotherapy*, 30(3), 495-501.
- Lay, C. H. (1986). At last, my research article on procrastination. *Journal of research in personality*, 20(4), 474-495.
- Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. *Journal of personality assessment*, 95(6), 610-624.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological bulletin*, 107(1), 34.

- Leary, M. R., Patton, K. M., Orlando, A. E., & Wagoner Funk, W. (2000). The Impostor Phenomenon: Self-Perceptions, Reflected Appraisals, and Interpersonal Strategies. *Journal of Personality, 68*(4), 725-756.
- Levy, S. R., & Dweck, C. S. (1997). Implicit theory measures: Reliability and validity data for adults and children. *Unpublished manuscript, Columbia University, New York.*
- Lynch Jr, J. G., Netemeyer, R. G., Spiller, S. A., & Zammit, A. (2009). A generalizable scale of propensity to plan: the long and the short of planning for time and for money. *Journal of Consumer Research, 37*(1), 108-128.
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2011). Social exclusion causes people to spend and consume strategically in the service of affiliation. *Journal of Consumer Research, 37*(5), 902-919.
- Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. *Journal of personality and social psychology, 35*(4), 250.
- O'cass, A., & Frost, H. (2002). Status brands: examining the effects of non-product-related brand associations on status and conspicuous consumption. *Journal of product & brand management, 11*(2), 67-88.
- Packard, G., Gershoff, A. D., & Wooten, D. B. (2016). When boastful word of mouth helps versus hurts social perceptions and persuasion. *Journal of Consumer Research, 43*(1), 26-43.
- Ratner, R. K., & Kahn, B. E. (2002). The impact of private versus public consumption on variety-seeking behavior. *Journal of Consumer Research, 29*(2), 246-257.
- Sakulku, J., & Alexander, J. (2011). The impostor phenomenon. *International Journal of Behavioral Science (IJBS), 6*(1).

- Semmann, D., Krambeck, H. J., & Milinski, M. (2005). Reputation is valuable within and outside one's own social group. *Behavioral Ecology and Sociobiology*, 57(6), 611-616.
- Sirgy, M. J., Grewal, D., Mangleburg, T. F., Park, J. O., Chon, K. S., Claiborne, C. B., ... & Berkman, H. (1997). Assessing the predictive validity of two methods of measuring self-image congruence. *Journal of the academy of marketing science*, 25(3), 229-241.
- Steel, P. (2007). The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure.
- Stöber, J. (2000). Frost Multidimensional Perfectionism Scale. In J. Maltby, C. A. Lewis, & A. Hill (Eds.), *Commissioned reviews of 250 psychological tests* (Vol. 1, pp. 310-314). Lampeter, UK: Edwin Mellen Press.
- Stoeber, J., & Childs, J. H. (2010). The assessment of self-oriented and socially prescribed perfectionism: Subscales make a difference. *Journal of personality assessment*, 92(6), 577-585.
- Striegel-Moore, R. H., Silberstein, L. R., & Rodin, J. (1993). The social self in bulimia nervosa: public self-consciousness, social anxiety, and perceived fraudulence. *Journal of abnormal psychology*, 102(2), 297.
- Veblen, T. (2005). *The theory of the leisure class; an economic study of institutions*. Aakar Books.
- Vergauwe, J., Wille, B., Feys, M., De Fruyt, F., & Anseel, F. (2014). Fear of Being Exposed: The Trait-Relatedness of the Impostor Phenomenon and its Relevance in the Work Context. *Journal of Business and Psychology*, 1-17.



- Wang, Y., & Griskevicius, V. (2014). Conspicuous consumption, relationships, and rivals: Women's luxury products as signals to other women. *Journal of Consumer Research*, 40(5), 834-854.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063.
- Yorkston, E. A., Nunes, J. C., & Matta, S. (2010). The malleable brand: The role of implicit theories in evaluating brand extensions. *Journal of Marketing*, 74(1), 80-93.