We are IntechOpen,
the world's leading publisher of Open Access books
Built by scientists, for scientists

6,900
Open access books available

185,000
International authors and editors

200M
Downloads

Our authors are among the

154
Countries delivered to

TOP 1%
most cited scientists

12.2%
Contributors from top 500 universities

CLARIVATE ANALYTICS
BOOK CITATION INDEX INDEXED

WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Dare to be Disruptive! The Social Stigma toward Creativity in Higher Education and a Proposed Antidote

Amanda Lohiser and Gerard J. Puccio

Abstract

Despite the fact that creativity has been named one of the top-10 skills necessary for success in the twenty-first century, the current educational system in the developed world stifles creativity through its focus on convergent thinking and standardized testing. We propose that a stigma toward creativity exists among educators, which prevents successful implementation of creative teaching and fostering creativity within the classroom. The proposed root cause of the stigma toward creativity in education – that creativity is perceived as disruptive – is examined through the lens of the Adaptor-Innovator theory of creativity and the implicit and explicit theories of creativity, as well as the psychological factors inherent to the social construction of stigma. Seminal and current research in the fields of creativity studies and communication studies offer insight into this phenomenon. The chapter concludes by proposing an antidote to address and fight this stigma as seen through the lens of Fishbein and Ajzen's Theory of Reasoned Action.

Keywords: creativity, higher education, social stigma, implicit and explicit theories, adaptor-innovator theory of creativity, theory of reasoned action

1. Introduction

If the events of the first half of 2020 have taught us nothing else, it is that we are in the midst of an era defined by *change*. From a global pandemic, to battles for civil equality, to catastrophic climate change, to ongoing political upheaval around the world, we are living in a time in which efforts to simply "maintain the status quo" are not only inefficient, but deadly to any organization or institution. The need to be able to *adapt* and *innovate* is paramount in this New Industrial Revolution - one that has heralded in an innovation economy, driven by and built in response to the change around us.

It is in this era that students are persevering to obtain an education, and their instructors are persevering to provide it to them. If the grandparents of yesteryear spoke hyperbolically of their "walk to school that was uphill both ways," today's students certainly will have a similar tale to tell – but one devoid of hyperbole – of the uphill battle they and all the members of their schools and universities fought to keep educational goals on track in a world that was in a constant state of flux.

In this uncertain world, students need creative thinking more than ever before - and it is this particularly salient life skill that is lacking in our educational system. Despite the fact that creativity has been named one of the top-10 skills necessary for success in the twenty-first century [1], the current education system in the developed world stifles creativity through its focus on convergent thinking and standardized testing [2–4]. As this position is already widely supported, this chapter focuses on making a case for teaching creatively and creativity in higher education, with a specific focus on a significant barrier that stands in the way of enhanced levels of creative education. We maintain that a stigma exists in association with creativity, and that until this stigma is called out and addressed, higher education will continue to fall short of providing this essential twenty-first century skill to its students.

The perception of creativity by laypeople is explored in this chapter by way of the Adaptor-Innovator theory of creativity, and the implicit and explicit theories of creativity. The stigma toward creativity in education is examined through the lens of the social psychology of the construction of stigma and is supported through seminal and current research in the field of creativity studies. The paper will conclude with proposed antidotes to address and fight this stigma.

There is a dearth of research on *factors* that influence teachers' beliefs about creativity [3], as well as on attitudes toward creativity in *higher education*, specifically. The ultimate goal of this current chapter, therefore, is to lay the foundation for future research to explore in more depth to what extent this stigma exists specifically in *higher education* and isolate and clarify the cause(s) of that specific stigma.

2. What is creativity?

2.1 History of creativity in education as a teachable subject

The focus on creativity in education in the Western hemisphere became a key area of concern following the successful launch of *Sputnik* by the former U.S.S.R. in 1957. The failure of engineers from the United States and other Western countries to beat the former Soviet Union in the Space Race was largely attributed to a lack of creativity. Creativity would subsequently be deemed by the U.S. Committee on Education and Labor as essential for "prosperity [and] survival of society" ([5], p. 166).

Creativity field experts, including Csikszenthihalyi, Guilford, Parnes, and Treffinger, influenced the shift in formal education from "knowledge acquisition" [6] to teaching children how to "deal with ambiguous problems, coping with the fast-changing world and facing an uncertain future" ([5], p. 166) [7].

2.2 Application of creativity in the process of higher education

But what *is* creativity, and what is its role in education? In an article published in the *Creativity Research Journal*, Runco and Jaeger sought to pinpoint the origin of what might be considered the standard definition of creativity as that which "requires both originality and effectiveness" ([8], p. 92). To that end, Runco and Jaeger concluded that, while a definition of *originality* used by Barron in 1955 comes close to addressing both of these constructs, the definition of the concept of *creativity*, specifically, put forth by Morris Stein in 1953 seems to both originate and best encapsulate this two-part concept. Stein's definition of creativity, and its intersection with both culture and education, merit further examination.

In 1953, Stein defined *creativity* thus: "The creative work is a novel work that is accepted as tenable or useful or satisfying by a group in some point in time" ([9], p. 311). He goes on to explicate that *novelty* indicates something that did not previously exist; that while it might be the end result of a new combination of previously existing things, the final product is something that contains some new element or elements. As to *tenable* or *useful* or *satisfying*, Stein explains that the creative product must be communicated to others and validated by those others through some effective communicative means with consideration of the audience's perspective. In explaining *acceptance by a group*, Stein states that the creative product must ultimately resonate with the feelings, needs, or experiences of the group. This acceptance might lead to the polishing of the product based on the feedback of that group, thus further refining the product to better fit the people for whom it was intended.

In this same seminal piece, Stein also explores the important role that culture plays in the fostering and acceptance of creativity - a point that resonates with the current topic of acceptance of creativity within higher education: "Attention must also be directed," Stein states, "to the broader aspects of education. For example, does the culture tolerate deviation from the traditional, the status quo, or does it insist upon conformity, whether in politics, science, or at school? Does the culture permit the individual to seek new experiences on his own, or do the bearers of culture (parents, teachers, and so on) 'spoon-feed' the young so that they constantly find ready-made solutions available to them as they come upon a situation that is lacking in closure ([9], p. 319)?" It is this critical connection between *importance* of creativity and the *tolerance* toward creativity shown within a culture - Stein specifically calls out schools as an important part of that formative culture here - that is still in need of attention, still in need of reform, and must, once and for all, be finally addressed and changed, well over a half-century since Stein put forth this claim.

There is an interesting pattern that arises in subsequent definitions of creativity. Creativity is specifically referred to as an *ability.* Creativity is defined as "the ability to bring new and valuable things into being" ([10], p. 17), "...the ability to generate new ideas and to apply them in practice" ([11], p. 136) and "the ability to see what isn't there, to recognize its power, and to make that power manifest" [12]. Thus, as creativity is an *ability*, one can ascertain that creativity can be taught, a position well-supported by previous literature pertaining to successful implementation of creative training procedures in organizational settings (e.g. [13, 14]) and in higher education (e.g. [15]).

In Bloom's revised taxonomy, *Create* is considered the highest order of thinking, defined as "Putting elements together to form a novel, coherent whole or make an original product" ([16], p. 215). Thus, one can also claim that not only can creativity be taught, but that it *must* be taught, as to *create* is to reach the highest order of human thought. But how essential is this skill to students? Should creativity be added into curricula at the transdisciplinary level?

A recent study by van Broekhoven, Cropley, and Seegers explored the nature of creativity in students in the arts versus those in science, technology, engineering, and mathematics (STEM) courses. They surveyed 2,277 German university students and found that high openness, high Creative Self-Efficacy, and strong proficiency in divergent thinking are "general prerequisites for creativity" across *all* domains. The researchers call for educators from kindergarten through university to recognize that creativity should be both understood as, and taught as, a core competency - creativity is an essential skill that is transdisciplinary [17].

All students - in art, science, technology, engineering, and mathematics - not only have the potential to be creative, but must have this innate predisposition

enhanced to ensure success in their own disciplines, and prepare them for success in their careers and lives beyond university.

2.3 Higher education as an economic engine: driving innovation through creativity

The role of higher education is to prepare students for future success. Today's world can be best described by an acronym used in pedagogy by the U.S. Army War College since the late 1980s: *VUCA* [18]. VUCA stands for Volatile, Uncertain, Complex, and Ambiguous, and describes the type of environment in which students should be prepared to survive – and thrive – after graduation. Even before the events of the first half of 2020, the world in which today's university graduates find themselves is surely a VUCA one – with the rate at which information becomes outdated (*Volatility*) [19], the types of jobs available in the future – many of which have not even been invented yet (*Uncertainty*) [20], the current economic climate (*Complexity*) [21], and the role that mass digitization is playing on everything from employment to mass communication (*Ambiguity*) [22].

To highlight the nature of our rapidly evolving world, the 2018 World Economic Forum charts the skills on the rise and on the decline in the workplace. By 2022, the top 10 skills that will be in demand include the following [1]:

1. Analytical thinking and innovation

2. Active learning and learning strategies

3. Creativity, originality, and initiative

4. Technology design and programming

5. Critical thinking and analysis

6. Complex problem-solving

7. Leadership and social influence

8. Emotional intelligence

9. Reasoning, problem-solving, and ideation

10. Systems analysis and evaluation

This list highlights the importance of creativity. Not only is it explicitly referenced as the third item on this list, but the skills inherent to creativity and creative problem-solving (i.e. analytical thinking, innovation, active learning, critical thinking, complex problem-solving, leadership, social influence, emotional intelligence, reasoning, ideation) appear throughout the entire list. Creativity is the driving force of innovation in our VUCA world. Our educational system, however, seems to be woefully lagging behind in fostering the creativity-relevant skills so necessary for success in today's workplace.

Despite creativity's necessary place in education, it is missing from curricula and practice. Moreover, a strange series of stereotypes and misconceptions can be spotted when the word *creativity* is evoked in everyday parlance. In order

to explore this creativity stigma, we must delve into these stereotypes. To that end, we must first examine the concepts of *creative style*, and then *implicit and explicit theories of creativity*.

2.4 Stereotyping creativity as disruptive: An examination of creative style and implicit and explicit theories of creativity

2.4.1 Creative style

In the late 1970s, Kirton put forth a theory and an assessment by which one's creative *style* could be assessed, rather than one's creativity *level*. With the Adaption-Innovation Theory, Kirton proposes that individuals fall somewhere within a continuum of creative styles that range between *adaptive* and *innovative*, which can be measured by the Kirton Adaption-Innovation (KAI) Inventory [23].

Highly adaptive people ("Adaptors") are primarily concerned with making improvements to ideas or processes that fit within the confines of the parameters already set in place within their organizations. They are likely to try to solve rather than seek problems. They tend to challenge rules cautiously, and usually only when backed by others. Highly innovative people ("Innovators"), on the other hand, are concerned with making improvements to ideas or processes by removing those ideas or processes from the confines of the previously established organizational conventions, and then proposing solutions that completely reconceptualize the idea. They tend to discover both problems and unique solutions, and often challenge rules at the expense of previously held traditions [23].

According to Kirton, in traditional workplaces, Adaptors' solutions to problems are more readily accepted as they already fit within a familiar framework, whereas Innovators' solutions face more opposition, as they seem to "come out of left field," and thus tend to be seen as more *disruptive* to the organization's cultural norms. Kirton makes the well-documented claim that "organizations in general, and especially organizations which are large in size and budget, have a tendency to encourage bureaucracy and adaptation in order to minimize risk" ([23], p. 140). This skew toward adaptation tends to lessen based on the type of industry. Research and development, and occupations that act as interfaces between client and stakeholder tend to lean more toward innovative approaches [23].

From the Adaption-Innovation Theory stems a body of research aimed at exploring laypersons' perceptions toward Adaptors and Innovators within work environments, particularly as those attitudes pertain to creative problem solving. This line of research has illuminated the phenomenon that laypersons have a bias toward perceiving an "innovative" person as being more creative than an "adaptive" person. Thus, this bias reveals how *creativity* is perceived by laypersons – as discordant; as bucking the system; as disruptive.

2.4.2 Implicit and explicit theories of creativity

Implicit theories, in general terms, are a result of the constellation of observations gathered by laypersons as driven by their own perception of the world. Explicit theories, by contrast, are a result of empirical study and scientific observation. Thus, implicit theories of creativity are those influenced by how "the public" view creativity. Explicit theories of creativity are those driven by academic research. Research patterns indicate that implicit theories of creativity – laypeople's idea of what a "creative person" looks like – are very much in keeping with the description

of the Innovator as outlined by Kirton [24]. The findings from a series of studies across a range of cultures generally support this claim.

A 2000 study presented 188 American participants with two different lists of characteristics, labeled "Person A" (whose list was populated with Adaptor traits) and "Person B" (whose list was populated with Innovator traits; the Person A and Person B lists were randomized to prevent an order effect; that is to say, in some cases Person A reflected the innovative qualities and Person B the adaptive characteristics). Survey respondents were asked to rate the creativity of both persons on a 10-point scale ranging from 1 (not at all creative) to 10 (exceptionally creative). Results revealed that the participants judged the "person" with Innovator traits as being significantly more creative than the "person" with the Adaptor traits. Research participants also completed the KAI and it was found that those with an innovative preference showed an even stronger bias in judging the Innovative style as being more creative [25, 26].

In an ensuing 2003 study, 128 Argentinian participants took a similar measure, in which a person is described with Innovator traits and another person is described with Adaptor traits, and then were asked to supply words that they associated with *creativity*. The findings of this study indicated that not only did Argentinian laypeople perceive the Innovator persona to be more creative, but that the words they associated with creativity included "Imagination," "Intelligence," "Ingenious," "Innovation," "Solves problems," "Inventor" and "Looks for solutions" ([27], p. 57).

A 2014 study compared 139 laypeople from the U.S. and 384 laypeople from the main ethnic groups in Singapore (defined by the researchers as Chinese, Indian, and Malay). Using the same measure described previously, results indicated that Kirton's Innovators were rated as being more creative than Adaptors, and words common across both groups associated with creativity were "think outside the box," "new," "innovative," "unusual," and "different" ([28], p. 227).

A study with contradictory findings still sheds light on the implicit and explicit theories of creativity. In a study of 201 Saudi Arabian laypeople, participants used the same instrument - they were presented with Kirton's description of the Adaptor as one persona and the Innovator as a second persona and were asked to rate each style with respect to creativity level, and then provide words they associated with *creativity*. For the purpose of this study, the instrument was translated (and back-translated) from English to Arabic. Surprisingly, the results of this study showed that Adaptors were rated more creative than Innovators. However, words most frequently associated with creativity included "*Innovative* [emphasis ours]," "distinguished," "development," "novelty," and "discovery" ([29], p. 12), indicating a possible cultural difference between the conceptualization of creativity between Saudis and Argentinians, Americans, and Singaporeans. Yet, in the discussion of this study, the researcher posited how the highly conforming nature of Saudi family and school life might have influenced the results, indicating that "the characteristics and behavior of innovative person[s] based on Kirton's description are not welcomed [or] encouraged", thus leading to the description of Innovator as being a less credible person altogether [p. 14]. The researcher goes on to indicate that while the Adaptor was rated more creative, the word "Innovative" was mentioned most frequently in the words participants associated with creativity, thus supporting the notion that the prevailing perception of creativity is that of a person who is, for all intents and purposes, *disruptive* to the status quo.

In an effort to examine college and university students' implicit perceptions of creativity, a pilot study was conducted in which 93 undergraduates at a northeastern American liberal arts college were asked "what words do you associate with creativity?" The top five words included *art*, with 55 occurrences (or some iteration thereof, e.g. *artist*, *artistic*), *imagination*, with 27 occurrences (or iterations

including *imaginative*, *imagine*), *unique*, with 16 occurrences, *color*, with 15 occurrences, and *music*, with 14 occurrences. Following these words was *innovation*, with 11 mentions. These preliminary findings suggest further confirmation of the bias toward *Innovation* in laypeople's perceptions of creativity, as well as the presence of the *art bias* [30], in which *creativity* is equated with *artistic talent*.

Finally, research conducted by Mueller, Melwani, and Goncalo provide important insights. In an article entitled "The Bias Against Creativity: Why People Desire but Reject Creative Ideas," the results from two studies suggest that when faced with uncertainty, people are likely to harbor an implicit bias against creativity and also judge creative ideas more harshly. Additionally, when unoriginal or "more practical" solutions are readily available, people tend to be less accepting of creative ideas [31]. In a later book, *Creative Change: Why We Resist It… How We Can Embrace It*, Mueller states that creative change requires comfort with uncertainty. However, because people are hardwired to resist uncertainty, they also resist those disruptive, uncertainty-producing creative ideas, even when they say they *want* creative ideas. Creative change, Mueller argues, is a learned skill [32]. In the concluding lines of the 2012 study, the researchers put out the call to action that "…the field of creativity may need to shift its current focus from identifying how to generate more creative ideas to identifying how to help innovative institutions recognize and accept *creativity* [emphasis ours]. Future research should identify factors that mitigate or reverse the bias against creativity" ([31], p. 17).

From the research explored above, we can make the following assertions. First, Adaptors and Innovators are *both* creative. Recall that the A-I theory does not assess *level* of creativity, but *style* of creativity. Second, traditional organizations are biased in favor of the "adaptive" style of creativity and against the "innovative" style of creativity, as the creative solutions Adaptors offer to problems fit within the predefined paradigms of the organization's culture. By contrast, Innovators rock the proverbial boat with their creative solutions which seem, to the non-Innovator, to come out of left field, because Innovators seek out problems to solve, or take existing problems out of their predefined framework. Innovators are perceived as being disruptive. Third and finally, when laypeople are asked to define a creative person, their definition is far more closely related to that of the "disruptive" Innovator.

Therefore, when laypeople are asked about their attitudes toward *creativity*, and they are already operating from the assumption that creative people are disruptive, they are likely to be biased *against* creativity, because they are biased against disruption. Creativity, whether in a conscious or a subconscious way, becomes synonymous with *disruption*.

The hypothesis set forth in this chapter is that fostering creativity as a teaching practice is not implemented with greater intentionality in higher education because a stigma exists toward creativity in the classroom. This stigma is based on creativity's association with disruptive behavior. To examine this hypothesis further, let us define and explore the construct of social stigma.

3. What is stigma and how is it manifested toward creativity in education?

3.1 The definition and formation of stigma

Since Erving Goffman first explained stigma as the process by which members of society reduce a person in their minds based on some perceived discrediting aspect [33], much effort has been put forth toward the advancement of a deeper understanding of not just what sigma is, but how it is formed. Consider these two

definitions of stigma: Stigma is "a characteristic of persons that is contrary to a norm of a social unit" ([34], p. 80) and "stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context" ([35], p. 505) [36].

Stangor and Crandall [37] developed a theoretical model that helps explain how stigma develops, involving three major components: (1) function, (2) perception, and (3) social sharing (**Figure 1**). While this and related frameworks are usually applied to stigma research in the field of health communication and in sociological arenas, like mental illness stigma [38], AIDS stigma [39], and homelessness stigma [40], this framework is also relevant to the implementation of creativity in higher education.

3.2 Creativity stigmatized as symbolic threat

This chapter will focus on the first stage of stigma formation in Stangor and Crandall's model: The initial perception of a *tangible* or *symbolic threat*. It is this second kind of threat - *symbolic threat* - that merits closer examination. *Symbolic threat* is defined as one that comes from violations of values and threats to social order [37], and which involves "perceived group differences in morals, values, standards, beliefs, and attitudes" ([41], p. 25). *Symbolic threat* is that which "threaten[s] the way in which a group ordains its social, political, or spiritual domains" ([42], p. 26). This *threat to social order*, or *disruptiveness*, as it is named in ensuing literature (e.g. [38]), is one that merits further attention as it is the *disruptiveness* of creativity entering the well-ordered classroom -
particularly those classrooms in higher education - that is the root of the stigma currently proposed by the authors of this chapter.

3.3 The prevalence of symbolic threat in the stigmatizing view that creativity in the classroom is *disruptive*

We have established the case by which *creativity* is equated to the Innovator's approach to creative problem solving. We see that innovators are inherently perceived as being disruptive. But to what extent do these findings feed a stigma toward creativity in the classroom?

In the introduction to *The Incubation Model of Teaching: Going Beyond the Aha!*, Torrance and Safter [43] compare the plight of the "great teacher" to that of Jesus Christ, as portrayed in Andrew Lloyd Webber's dramatization *Jesus Christ Superstar*. While the authors' metaphorical comparison of the creative teacher to that of a persecuted religious figurehead juxtaposed with the narrative summary of a 1970s rock opera might seem slightly dramatic and/or superfluous at first glance, many of the parallels Torrance and Safter draw out from this unusual analysis point to the prevalence of stigma toward creative instructor by way of symbolic threat of disruption of the norm, particularly when they state "Those in authority dare not leave them to their own devices" and "They are blamed for letting their followers get out of hand and are held responsible for the independent action of their followers" ([43], p. 2).
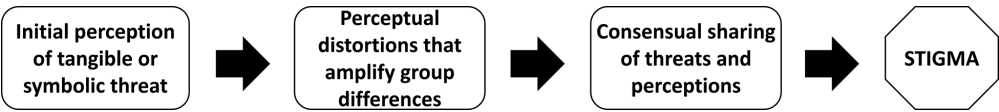

Figure 1.
The role of threat, perceptual distortions, and societal sharing in the development of stigma. Source: Stangor and Crandall ([37], p. 73). Reprinted with permission of Guilford Press.

When Torrance and Safter opine that there are not enough "great teachers" in the world, they identify "great teachers" as those who have the following characteristics ([43], p. 1):

1. Great teachers perform miracles.

2. They inspire their students… to creative and independent thinking and action which may at times get out of hand.

3. They are continually in danger of "crucifixion."

The latter two statements, in which a creatively-led classroom may occasionally get out of hand, and in which the instructor is in danger of literal (or, as is more likely the case in contemporary experience, figurative) crucifixion, speak to stigmatization of creatively-led classrooms as disruptive, and those who lead those classrooms as disruptors deserving of punishment.

A review of seminal and contemporary literature concerning perceptions of creativity - in terms of teaching *creativity* and teaching *creatively* - in primary, secondary, and higher education provides support for the position that many instructors harbor stigmatizing attitudes toward creativity based on the nature of *disruptiveness* as the perceived symbolic threat.

In a 2005 study of 36 elementary school teachers, Aljughaiman and Mowrer-Reynolds conducted in-depth interviews with educators that explored the teachers' attitudes toward creativity, definitions of creativity, and perceptions of creative students. Results revealed that teachers frequently misconstrue what it means to be a *gifted high achiever* student with what it means to be a *creative* student. When teachers were asked to describe traits of creative students, they were more likely to describe traits that equated to *giftedness* rather than creativity. While creative traits such as the *ability to come up with novel ideas* were correctly identified as traits of creative students, traits more aligned with the concept of Divergence were not identified. Only 26% of the respondents stated that creativity involved *imagination* and *self-expression*, and only 9% mentioned *inventiveness*. Teachers failed to identify *curiosity*, *independence of judgment*, and *courage* as common characteristics of creative students. Aljughaiman and Mowrer-Reynolds conclude, "Students who display the above characteristics often challenge the teachers' authority, which may cause disturbance to the classroom organization" ([44], p. 29). A "disturbance to the classroom organization" supports the claim that creative students are stigmatized as threatening as they threaten the established norms and practices in a classroom.

In his chapter entitled "Creativity in the Classroom: The Dark Side" in the book *The Dark Side of Creativity*, Cropley [45] details a paradoxical statement: That educators freely state that creativity is an important skill, but then show a decided dislike toward creativity. He outlines the following proposals as to why instructors harbor a stigmatizing view toward creativity. Namely, creativity:

- shakes the foundations of the received classroom order,

- brings uncertainty for pupils (and parents),

- questions the value of laboriously acquired knowledge and skills,

- threatens loss of status and authority for teachers, and

- weakens teachers' self-image ([45], p. 304).

The stigma toward creativity again becomes evident in this list - namely, that creativity is a symbolic threat, and that the threat is in the form of *disruption*. Cropley further offers support for this concept by summarizing the teachers' views that creativity poses "a threat to good order and discipline" and that "it is sometimes hard to distinguish between creativity in the classroom and disorderliness or disruptiveness or even sheer willful naughtiness" ([45], p. 306).

Marquis and Henderson [46] conducted a study across eight universities in Ontario to determine how instructors perceive and implement the teaching and learning of creativity. The study cites a common theme found within literature on creativity in higher education - that creativity is heralded as an important skill (in Marquis and Henderson's article, by a 2012 report by the provincial government), but little to no data exist which address how this need is mobilized in the university environment.

One of the factors explored in this study was the influence of instructors' disciplinary identities on their perception of creativity and its pedagogical modalities. Disciplinary influence on the conceptualization of creativity include the argument of domain specificity (that true creativity within a given field can only be assessed by experts within that field), some may perceive creativity as more pertinent to some fields over others, and finally, that creativity is often affected by the aforementioned "art bias", through which creativity is fused in its scope with the arts, specifically.

The instrument used in Marquis and Henderson's study was a digital survey instrument in which the approximately 613 respondents were asked to provide definitions of creativity and to answer questions about the importance of creativity in their disciplines and their strategies for helping students develop their creative abilities. Several interesting findings emerged from this study, chief of which is the definitions of creativity provided by the participants and the overall value placed on creativity.

Definitions were characterized by themes common to the literature including *producing something novel* and *thinking outside the box*. Some participants indicated that their definitions were only relevant to their particular discipline, believing that definitions of creativity would vary widely based on academic field.

While both the overall importance of creativity and the responsibility to foster students' creativity were nearly universally rated as "important," some respondents from the STEM fields indicated that they had a difficult time envisioning the role of creativity within their fields, basing these statements on the assumption that creativity was about developing something entirely new, a point that speaks to the bias toward innovators over adaptors in the research previously described. Marquis and Henderson also found that *creativity* was infrequently named in official learning outcomes in courses and programs across the disciplines examined. One of the most significantly cited barriers toward implementing creativity education into their respective curricula was *not having sufficient time* [46].

Banaji, Cranmer, and Perrotta [47] conducted interviews of 81 educational stakeholders within European schools in an endeavor to uncover the barriers toward creativity implementation within the school system. They provide further support for this hypothesis in describing how the notion of "disciplinarian classroom environments" is passed on through generations of educational trainers to trainees, promoting an environment in which nonconformity is punished. Banaji, Cranmer, and Perrotta provide further evidence in stating that "some teachers' fear of losing control of the discipline in classes – linked to a lack of confidence in their own classroom management skills – discourages active learning approaches more widely than attempts to nurture creativity" ([47], p. 10). That the perceived disorder of a

classroom is linked with teachers' confidence in their own classroom management abilities is a salient point that is further examined in the next section.

4. How might we overcome symbolic threat stigma toward creativity in education?

4.1 Returning to the literature on *stigma*

In the literature about social stigma as applied to the field of health communication, top strategies implemented in the fight against social stigma include "education and teaching," and "normalizing" (e.g. [48, 49]). Therefore, it is logical to believe that we might reduce the symbolic threat-based stigma of the perception of creativity in the classroom as disruptive through these same means - creativity training and creativity normalization.

4.1.1 Education and training in creative teaching

In their 2018 meta-analysis of 53 contemporary studies examining teachers' beliefs about creativity and its nature, authors Bereczki and Kárpáti [3] concluded that teachers' beliefs toward creativity-fostering practices would be dramatically improved through gaining professional competency in teaching for creativity. Thus, one might extrapolate that the importance of implementation of creativity training among educators in the college and university setting cannot be ignored.

Consider Sheridan College in Ontario, Canada as an example. Around 2012, Sheridan College, formerly known as the Sheridan College Institute of Technology and Learning, set the goal of becoming a fully creative campus. Sheridan operationalized this goal by infusing creativity into their discipline-based courses, as well as offering courses fully centered on the subject of creativity. Sheridan also created a series of intensive professional development workshops on building creative thinking and creative problem solving into course learning outcomes, Creative Problem Solving, small group facilitation, and creativity training. Finally, Sheridan sought to infuse creative thinking and creative problem solving strategies and tactics into the college's day-to-day operations. These efforts have seen great success. Over 3,000 students have enrolled in a general elective course called "Creative Thinking: Theory and Practice." Well over 6,500 students have taken at least one of the five courses in a 5-course undergraduate certificate in creativity, with 200 students having completed the full certificate. And more than 300 faculty and administrators have taken part in the creativity professional development workshops [50]. Sheridan College serves as an exemplary case study in internalizing and operationalizing creativity at an institutional level. For two more case studies on universities that have successfully internalized creativity at this level, see Universidad Autónoma de Bucaramanga, Colombia, the first fully creative campus in Latin America, and the International Center for Studies in Creativity at SUNY Buffalo State [51].

As stated in Puccio and Lohiser [51], "There should be creativity courses, creativity content, and creativity professors at every university and college in the world" ([51], p. 26). The increase in competence in teaching creatively would thus not only mechanize the implementation of creativity in the classroom, but would also serve to increase instructors' confidence in their own abilities to foster creativity in an intentional manner, which in turn will likely reduce the stigma of creativity resulting in disorder and disruption.

4.1.2 Normalizing creativity in the classroom

It is our belief that the very act of training instructors in how to efficiently and effectively mobilize creativity as a pedagogical tool will initiate a normalization process. A red thread that runs through the courses at the Creativity and Change Leadership Department (formerly the International Center for Studies in Creativity) at SUNY Buffalo State is that its students should embrace creativity in every facet of their lives. Graduates should be so comfortable with the creative process that it becomes a way of life, rather than simply serving as a tool one produces from a toolbox and then files neatly away when a task is completed. Anecdotal evidence collected through interactions with peers in the program, and even the friends, family members, and colleagues of those peers suggests that the training in creativity functions as a deeply rooted normalization process that spreads, social-contagion style, through daily lexicon and routine behavior. Moreover, recent research has shown that the impact of the creativity curriculum taught at SUNY Buffalo State significantly improves creative attitudes [52] and shows long-lasting effects on divergent-thinking abilities [14]. If critical creativity components, including the Thinking Skills Model of Creative Problem Solving [53], The FourSight Model [54], and the Torrance Incubation Model of teaching [43], can be trained and taught to educators as prolifically as possible, it is quite likely that creativity will become a more normalized phenomenon within education, and thus will gradually be freed from stigma.

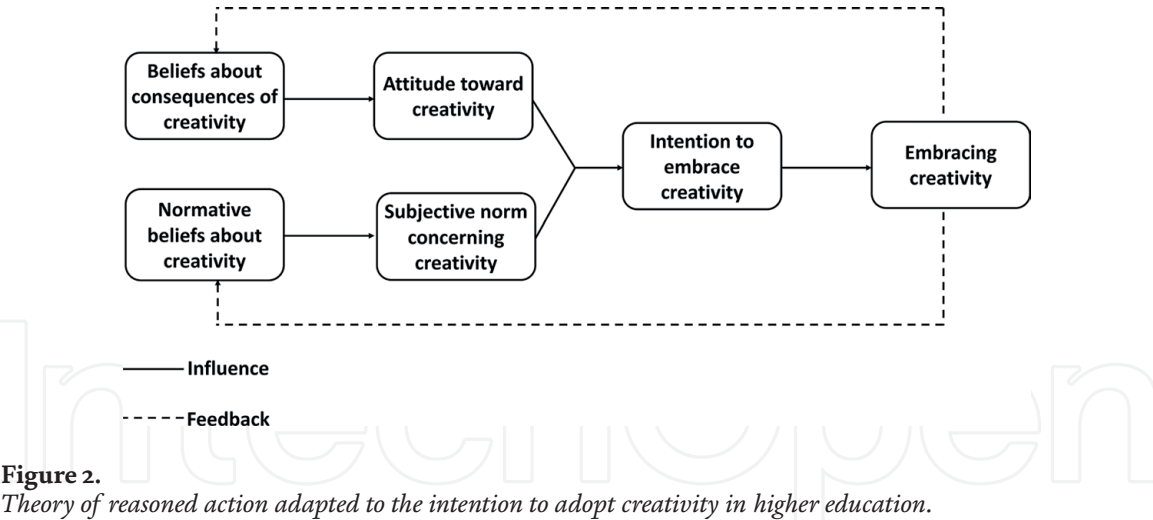## 4.2 Creativity and the theory of reasoned action

Creativity, as suggested by the scholars cited thus far, can be considered *an attitude, a belief, and a behavior.* One could go so far as to say that *creativity is not a linear activity;* rather, *creativity is an interactive lifestyle.* The first program in the world dedicated exclusively to the science of creativity at the graduate level, the Creativity and Change Leadership Department, was founded by Ruth Noller, Alex Osborn, and Sidney Parnes in 1967 at SUNY Buffalo State. This Department's core mission is *"To Ignite Creativity Around the World."* The *creativity as lifestyle* tenet is one perpetuated by the faculty, staff, and alumni within this program, many of whom are or go on to become educators. The overarching belief inherent to this academic department is that students do not merely obtain a certification or a degree, but rather, adopt philosophies that allow them to lead a creative lifestyle characterized by strong leadership and change advocacy.

This philosophy of embracing creativity as a lifestyle can be analyzed through the lens of the Theory of Reasoned Action [55] and can be used as a model through which to enact the societal change necessary to overcome the stigma toward creativity in higher education.

4.2.1 Theory of reasoned action

The Theory of Reasoned Action, developed by Martin Fishbein and Icek Ajzen in 1967, charts the process by which attitudes inform beliefs, which influence individuals' intent to act, which then serve to rejuvenate the cycle through informed knowledge [55]. **Figure 2** shows an adapted model of this theory that has been structured by the authors of this chapter to serve as a lens through which to mobilize a deliberate approach toward combating stigma toward creativity in higher education.

This modified model of the Theory of Reasoned Action shows that individuals' beliefs about the *consequences* of creativity directly influence their attitudes *toward*

Figure 2.
Theory of reasoned action adapted to the intention to adopt creativity in higher education.

creativity. The normative beliefs held within a society will directly influence that society's subjective norms concerning creativity. As previously stated by Stein [9], the surrounding culture and educational institutions within that culture are critical to the extent to which deliberate creativity is allowed to be fostered. Both the individual's attitude toward creativity and the societal norms concerning creativity will in turn influence a person's intention to embrace creativity. This intention, finally, will directly influence the likelihood of that individual embracing creativity. The action of embracing creativity ultimately provides experiential feedback that helps foster or reframe the beliefs about the consequences of creativity (the individual might consider "how was my creative action received, and would I do it again now that I understand the consequences") and that same action generates feedback which contributes to the society's collective normative beliefs about creativity (an individual's positive or negative outcome of such an action will serve as the basis upon which others form their beliefs about creativity and how it fits within their societal norms).

Fostering a positive attitude toward creativity in higher education is paramount to its successful application. Creativity, in part, can be considered an attitude, or mindset. Fostering deeply-held positive beliefs toward creativity is similarly critical. Quintessentially, creativity also is a belief system, and ultimately, creativity is the product of a culminated set of behaviors, potentially a lifestyle of cultivated actions. These behaviors include seeking opportunities to constructively evolve through Polarity Management [56], which is to say, maintaining the status quo where helpful and, more relevant to the current situation, disrupting the status quo where necessary and seeking opportunities to lead others *through* and *to* creativity [57].

If more instructors were to increase their intention to ultimately embrace creativity, this intention will hopefully lead to action, which will in turn provide feedback on a broader normative belief system and subjective societal norm concerning creativity in academia. For every individual who disrupts the status quo of what is arguably a lack of deliberately creative education tactics within higher education, those individuals would contribute positively to developing normative societal and subjective beliefs about creativity.

5. Conclusion

As stated in the opening of this chapter, the topic of stigma toward creativity explored as it relates to education in a general sense is meant to serve as a springboard for a deeper dive into the realm of higher education. While stigma toward

creativity is already documented, few studies exist on the *causes* of those negative attitudes, or stigmas, toward creativity, and fewer yet exist which explore attitudes toward creativity in *higher education,* specifically. Therefore, this chapter has served to identify a gap in the current research, particularly that of exploring the communication phenomenon of the relationship between attitude and stigma toward creativity in higher education. More research in this area is necessary so that *informed* action can be taken toward implementing deliberate creativity education in higher education.

A widely accepted tenet of the relationship among these constructs of attitude, behavior, communication, and stigma [58] suggests that stereotypes are born out of natural human habits toward cognitive processing. The reduction of one's cognitive load through categorization of information can corrupt into binary absolutes and laws (e.g. "all people from X group are alike in this particular way"). These cognitions travel, as it were, to the heart where they stimulate emotional responses (e.g. "That person is from X group toward which I have a negative association, and so I fear him"). The emotion then travels outward to the limbs, where the emotion is made manifest into behavior, becoming discrimination (e.g. "I will not engage with him based on my fear").

The key, then, to changing individuals' behavior - to reducing stigma-led discrimination toward creativity as a critical educational subject and critical educational method - lies in changing hearts and minds. Minds must be changed through training and education, and the subsequent normalization might just change hearts. Creativity is a force for innovation. If we do not promote creative thinking in our educational practices, if we do not teach *creativity*, if we do not teach *creatively*, we will never realize the true power and promise of this force.

Author details

Amanda Lohiser[1*] and Gerard J. Puccio[2]

1 SUNY Fredonia, Fredonia, NY, USA

2 SUNY Buffalo State, Buffalo, NY, USA

*Address all correspondence to: lohiser@fredonia.edu

IntechOpen

References

[1] World Economic Forum. The future of jobs report. 2018. Available from: http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

[2] Adobe. Barriers to creativity in education. Educators and parents grade the system. 2013. Available from: https://blogs.adobe.com/conversations/files/2013/06/adobe_Education_infographics-FINALB.jpg

[3] Bereczki EO, Karpati A. Teachers' beliefs about creativity and its nurture: A systematic review of the recent research literature. Educational Research Review. 2018;**23**:25-56

[4] Robinson K. Do schools kill creativity? [Video file]. 2006. Available from: https://www.ted.com/talks/ken_robinson_says_schools_kill_creativity?language=en

[5] Shaheen R. Creativity and education. Creative Education. 2010;**1**(03):166

[6] Davies D. Creative teachers for creative learners-a literature review. 2004. Available from: www.ttrb.ac.uk/attachments/c3096c7b-da04-41ef-a7ac-50535306e8fb.pdf

[7] Parkhurst HB. Confusion, lack of consensus, and the definition of creativity as a construct. Journal of Creative Behaviour. 1999;**33**(1):1-21

[8] Runco MA, Jaeger GJ. The standard definition of creativity. Creativity Research Journal. 2012;**24**(1):92-96

[9] Stein MI. Creativity and culture. The Journal of Psychology. 1953;**36**(2):311-322

[10] Nielsen D, Thurber S. The Secret of the Highly Creative Thinker: How to Make Connections Others don't. Amsterdam: BIS Publishers; 2016

[11] Robinson K, Aronica L. Creative Schools: The Grassroots Revolution that's Transforming Education. New York: Penguin books; 2015

[12] Miller B, Vehar J, Firestien R, Thurber S, Nielsen D. Creativity Unbound. Williamsville, NY: Innovation System Group; 2001

[13] Puccio GJ, Firestien RL, Coyle C, Masucci C. A review of the effectiveness of CPS training: A focus on workplace issues. Creativity and Innovation Management. 2006;**15**(1):19-33

[14] Puccio GJ, Burnett C, Acar S, Yudess JA, Holinger M, Cabra JF. Creative problem solving in small groups: The effects of creativity training on idea generation, solution creativity, and leadership effectiveness. Journal of Creative Behaviour. 2020;**54**(2):453-471

[15] Reese HW, Parnes SJ, Treffinger DJ, Kaltsounis G. Effects of a creative studies program on structure-of-intellect factors. Journal of Education & Psychology. 1976;**68**(4):401

[16] Krathwohl DR. A revision of Bloom's taxonomy: An overview. Theory Into Practice. 2002;**41**(4):212-218

[17] Van Broekhoven K, Cropley D, Seegers P. Differences in creativity across art and STEM students: We are more alike than unalike. Thinking Skills and Creativity. (in press)

[18] US Army Heritage and Education Center. Who first originated the term VUCA (Volatility, Uncertainty, Complexity and Ambiguity)? 2018. Available from: http://usawc.libanswers.com/faq/84869

[19] World Economic Forum. The future of jobs: Employment, skills, and workforce strategy for the fourth industrial revolution. In: Global

Challenge Insight Report. Geneva: World Economic Forum; 2016. Available from: http://www3.weforum.org/docs/ WEF_Future_of_ Jobs.pdf

[20] Coles P, Cox T, Mackey C, Richardson S. The Toxic Terabyte: How Data-dumping Threatens Business Efficiency. IBM Global Technical Services; 2006. pp. 1-2. Available from: https://fliphtml5.com/uteh/ckfu

[21] Shaffer LS, Zalewski JM. Career advising in a VUCA environment. NACADA Journal. 2011;**31**(1):64-74

[22] Frey CB, Osborne MA. The future of employment: How susceptible are jobs to computerisation? Technological Forecasting and Social Change. 2017;**114**:254-280

[23] Kirton MJ. Adaptors and innovators: Why new initiatives get blocked. Long Range Planning. 1984;**17**(2):137-143

[24] Runco MA, Bahleda MD. Implicit theories of artistic, scientific, and everyday creativity. Journal of Creative Behaviour. 1986;**20**(2):93-98

[25] Chimento MD. Assessing theories of creativity concerning the level of adaptors and innovators [master's thesis]. Buffalo, NY: State University of New York at Buffalo, College at Buffalo; 2000

[26] Puccio GJ, Chimento MD. Implicit theories of creativity: Laypersons' perceptions of the creativity of adaptors and innovators. Perceptual and Motor Skills. 2001;**92**(3):675-681

[27] González M. Implicit theories of creativity across cultures [master's thesis]. Buffalo, NY: State University of New York at Buffalo, College at Buffalo; 2003

[28] Ramos SJ, Puccio GJ. Cross-cultural studies of implicit theories of creativity: A comparative analysis between the United States and the main ethnic groups in Singapore. Creativity Research Journal. 2014;**26**(2):223-228

[29] Alkeaid AA. Cross cultural perceptions of creativity: A sample from Saudi Arabia [master's thesis]. Buffalo, NY: State University of New York at Buffalo, College at Buffalo; 2004

[30] Runco MA. Creativity and education. New Horizons in Education. 2008;**56**(1):n1

[31] Mueller JS, Melwani S, Goncalo JA. The bias against creativity: Why people desire but reject creative ideas. Psychological Science. 2012;**23**(1):13-17

[32] Mueller J. Creative change: Why we resist it. In: How we Can Embrace it. Boston, MA: Houghton Mifflin Harcourt; 2017

[33] Goffman E. Stigma: Notes on the Management of Spoiled Identity. United Kingdom: Touchstone; 1963

[34] Stafford MC, Scott RR. Stigma, deviance, and social control. In: The Dilemma of Difference. Boston, MA: Springer; 1986. pp. 77-91

[35] Crocker J, Major B, Steele C. Social stigma. In: Gilbert DT, Fiske ST, Lindzey G, editors. The Handbook of Social Psychology. 4th Edition, Vol. 2. New York: Academic Press; 1998. pp. 504-553

[36] Link BG, Phelan JC. Conceptualizing stigma. Annual Review of Sociology. 2001;**27**(1):363-385

[37] Stangor C, Crandall CS. Threat and the social construction of stigma. In: Heatherton TF, Kleck R, Hebl M, Hull J, editors. The Social Psychology of Stigma. New York: The Guilford Press; 2003. p. 62

[38] Yang LH, Purdie-Vaughns V, Kotabe H, Link BG, Saw A, Wong G,

et al. Culture, threat, and mental illness stigma: Identifying culture-specific threat among Chinese-American groups. Social Science & Medicine. 2013;**88**:56-67

[39] Campbell C, Skovdal M, Mupambireyi Z, Gregson S. Exploring children's stigmatisation of AIDS-affected children in Zimbabwe through drawings and stories. Social Science & Medicine. 2010;**71**(5):975-985

[40] Belcher JR, DeForge BR. Social stigma and homelessness: The limits of social change. Journal of Human Behavior in the Social Environment. 2012;**22**(8):929-946

[41] Stephan WG, Stephan CW. An integrated threat theory of prejudice. In: Oskamp S, editor. Reducing Prejudice and Discrimination. New York: Psychology Press; 2013. pp. 23-45

[42] Arboleda-Florez J. What causes stigma? World Psychiatry. 2002;**1**(1):25

[43] Torrance EP, Safter HT, Safter T. The Incubation Model of Teaching: Getting beyond the Aha! Buffalo, NY: Bearly Limited; 1990

[44] Aljughaiman A, Mower-Reynolds EL. Teachers' conceptions of creativity and creative students. Journal of Creative Behaviour. 2005;**39**(1):17-34

[45] Cropley AJ. Creativity in the classroom: The dark side. In: Cropley DH, Cropley AJ, Kaufman JC, Runco MA, editors. The Dark Side of Creativity. New York: Cambridge University Press; 2010. pp. 297-315

[46] Marquis E, Henderson JA. Teaching creativity across disciplines at Ontario universities. The Canadian Journal of Higher Education. 2015;**45**(1):148-166

[47] Banaji S, Cranmer S, Perrotta C. What's stopping us? Barriers to creativity and innovation in schooling across Europe. In: Thomas K, Chan J, editors. Handbook of Research on Creativity. Northampton: Edward Elgar Publishing; 2013. pp. 450-463

[48] Corbiere M, Samson E, Villotti P, Pelletier JF. Strategies to fight stigma toward people with mental disorders: Perspectives from different stakeholders. The Scientific World Journal. 2012;**2012**:1

[49] Rivera AV, DeCuir J, Crawford ND, Amesty S, Harripersaud K, Lewis CF. Factors associated with HIV stigma and the impact of a nonrandomized multi-component video aimed at reducing HIV stigma among a high-risk population in New York City. AIDS Care. 2015;**27**(6):772-776

[50] Preece M, Katz Y, Richards B, Puccio GJ, Acar S. Shifting the organizational mindset: Exploratory evidence for the positive impact of creativity training and strategic planning. The International Journal of Creativity and Problem Solving. 2017;**27**(2):35-53

[51] Puccio GJ, Lohiser A. The case for creativity in higher education: Preparing students for life and work in the 21st century. Kindai Management Review. 2020;**2020**(8):30-47

[52] Puccio GJ, Mathers SK, Acar S, Cayirdag N. International center for studies in creativity: Curricular overview and impact of instruction on the creative problem-solving attitudes of graduate students. In: Handbook of Research on Creative Problem-Solving Skill Development in Higher Education. Hershey, PA: IGI Global; 2017. pp. 186-211

[53] Puccio GJ, Murdock MC, Mance M. Current developments in creative problem solving for organizations: A focus on thinking skills and styles. Korean Journal of Thinking & Problem Solving. 2005;**15**(2):43

[54] Grivas C, Puccio GJ. The Innovative Team. San Francisco, CA: Jossey-Bass Publishers; 2012

[55] Fishbein M, Ajzen I. Belief, Attitude, Intention, and Behavior Reading. MA: Addison-Wesley; 1975. pp. 913-927

[56] Johnson B. Polarity Management: Identifying and Managing Unsolvable Problems. Amherst, MA: HRD Press; 1996

[57] Puccio GJ. From the dawn of humanity to the 21st century: Creativity as an enduring survival skill. Journal of Creative Behaviour. 2017;**51**(4):330-334

[58] Stroebe W, Insko CA. Stereotype, prejudice, and discrimination: Changing conceptions in theory and research. In: Stereotyping and Prejudice. New York: Springer; 1989. pp. 3-34