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## Creative Processes Among HRD Professionals

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# CREATIVE PROCESSES AMONG HRD PROFESSIONALS

A Thesis Presented to the Faculty of the  
University Honors Program  
Northeastern Illinois University

In Partial Fulfillment of the Requirements  
of the NEIU Honors Program  
for Graduation with Honors

Briana L. Mesick  
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HONORS SENIOR PROJECT  
ACCEPTANCE AND APPROVAL FORM

BRIANA MESICK

CREATIVE PROCESSES AMONG HRD PROFESSIONALS

This thesis has been reviewed by the faculty of the NEIU Honors Program and is found to be in good order in content, style, and mechanical accuracy. It is accepted in partial fulfillment of the requirements for the NEIU Honors Program and graduation with honors.




May 10, 2022

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## ABSTRACT

Creativity is a required element for training and development (T&D) professionals to create successful learning initiatives. While research has noted how T&D professionals engage in creative practices, little research has been conducted regarding how their creative processes were developed. This study uncovered how T&D professionals first developed their creative processes through 1) their perception of creativity; 2) development of their creative processes when they first started as a T&D professional; 3) application of creativity in developing successful T&D interventions; and 4) use of the creative process to get back on track when facing a difficult project. Focusing on how HRD professionals develop their creative processes can result in tremendous success among T&D professionals while further enhancing organizational creativity and effectiveness. This can produce more knowledgeable and skilled HRD professionals who could then create interventions that promote success to an organization's human resources. This study followed a qualitative research case study approach for participants to provide a description of their experiences. Furthermore, this study followed a descriptive case study approach allowing participants to offer a thick rich analysis of their creative process. Participants were selected using the snowball sampling method where the researcher first reached out to former colleagues. These initial participants referred the researcher to other T&D professionals who qualified as participants. Data was collected through semi-structured interviews and individual artifacts. Each participant engaged in a 30–60-minute interview via videoconference or telephone and were asked to provide an artifact that relates to their creativity. While this study is on-going, several

themes have started to emerge. Preliminary findings display that T&D professionals require obtaining collaborative feedback to create successful interventions, which is often done by eliciting feedback from managers, co-workers and friends/family. They also require design autonomy, or the freedom to determine content, in developing the learning initiatives. Furthermore, T&D professional often utilize previous experience by applying successes and failures to new projects. While this study is still on-going, future research, such as a quantitative survey that elicits instructional designers' perception of creativity more in-depth, can provide for a more comprehensive analysis of the T&D professionals' creative process.

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## INTRODUCTION

The phrase ‘business as usual’ does not apply to the knowledge-based economy. As technology advances and globalization is ever-present, the old hierarchal systems will likely lead to failure. Organizations constantly face changes in their environment and culture while job designs are increasingly autonomous (Joo, McLean, & Yang, 2013). Remaining competitive in a global economy while satisfying the diverse demands of employees and stakeholders is critical to organizational success. Scholars are beginning to realize and explore the value and importance of creativity and innovation at both the individual and organizational levels (Huang, Yuan, & Li, 2019).

The initial focus of creativity research relied heavily on individual characteristics based on a psychological perspective, emphasizing cognitive and social processes (Loewenberger, 2009). Today, research recognizes the importance of individual ability but further focuses on stimulating creativity through cross-functional and integrative approaches (Joo, McLean, & Yang, 2013). As the need for creativity and innovation increases at the organizational level, so should the creative processes of human resource development (HRD) professionals.

In the late 1990s, Brynteson (1997) conducted a study using 10 HRD professionals that were considered the most creative. He discovered common themes that the HRD professionals shared as integral to their creative processes. The professionals agreed that time for reflection was of great importance. The research participants were quite perceptive and adept at deriving meaning from random events that sparked creativity. Moreover, participants noted they were lifelong learners, most often including subjects outside of their field (Brynteson). While Brynteson’s study highlights



characteristics that HRD professionals find vital to their creative processes, scant research exists focused on how HRD professionals develop their creative processes that lead to successful interventions.

HRD professionals are tasked with addressing individual and organizational improvements through learning and development initiatives (Joo, McLean, & Yang, 2013). While some research highlights how organizational leaders and HRD professionals can promote creativity in their subordinates (Joo, McLean, & Yang), little research has determined how HRD practitioners themselves foster creativity for professional practice.

In an evolving and competitive world, organizations must harness the power of creativity to address practitioner needs. Focusing on how HRD professionals develop their creative processes can result in tremendous success among T&D professionals while further enhancing organizational creativity and effectiveness. Fostering and promoting the creation of these processes would offer more knowledgeable and skilled HRD professionals who could then create interventions and performance support initiatives that promote success to an organization's human resources. Consequently, this qualitative study explored how HRD practitioners, who self-defined as creative, fostered creativity in T&D interventions in the field.

## LITERATURE REVIEW

Creativity and innovation are concepts that have been embraced by numerous organizations, including those that continuously undergo fundamental changes (Joo, McLean, & Yang, 2013). As technology advances and economies shift toward globalization, organizations look to develop innovative employees and creative practices

(Reiter-Palmon & Illies, 2004). Human Resource Development (HRD) practitioners are tasked with creating effective change management (Gosney, 2014). Organizational change, however, is not constant but based on performance and goals. HRD professionals must develop creative processes to recognize necessary changes and efficiently implement appropriate interventions (Brynteson, 1997).

In order to understand creativity, it is essential to understand what has been published on the topic. Some have noted that creativity is a “multifaceted phenomenon” (Loewenberger, 2009, p. 1-3) without a clear, agreed-upon definition. Moreover, Joyce Robinson (2008) stated that creativity has often been defined in specific fields based on how researchers view its function. Nevertheless, Griffith & Dunham (2015) noted that creativity was the “generation of an original and usable idea” (p. 135).

**Individual Creativity Research.** Sigmund Freud promoted creativity as a psychological concept. In particular, Freud’s psychodynamic theory asserted that creative processes are largely interrelated with emotion (Rank, 2008). Creative processes occur when reality and consciousness clash with the unconscious mind (Loewenberger, 2009). Freud’s psychodynamic approach paved the way for psychoanalytic theories. Freud theorized that individuals experience adaptive regression where they revert to an earlier stage of development. Through this experience, individuals will develop creative ideas via “sleep, daydreams, or intoxication” (Loewenberger).

Following Freud’s research, Gestalt psychologists developed a new concept of creativity. Gestalts viewed creativity as the formation of mental patterns that were interrelated elements that led to the “whole is greater than the sum of the parts” (Dacey, 1991, p. 318-319). For example, an architect envisions a design for a new building. The

architect then breaks down this vision into the specific elements that are required to complete the design. Gestalt psychology claimed that creativity was enhanced by viewing the problem, or the whole, through a new lens or with an altered perception, opposed to rearranging the parts (Dacey, 1991, p. 318-319).

At the beginning of the 20<sup>th</sup> century, mathematician Henri Poincaré developed the stages of the creative process. An individual engages in conscious preparation when they identify a problem and attempt to find a solution. When an immediate solution is not recognized, the individual will enter the incubation stage, unconsciously thinking about the problem. Incubation is often followed by the illumination stage, where a thought or solution becomes apparent to the individual (Simonton, 1999, p. 32-33). From this vantage point, the unconscious is what provokes the illumination of a creative idea or solution.

In 1926, Graham Wallas built upon Poincaré's theory by proposing an enhanced understanding of the four stages of the creative process. In particular, Graham delineated the process in four stages, including preparation, incubation, illumination, and verification (Tan, 2015). In the preparation phase, an individual identifies the problem and considers potential solutions (Ratnaningsih, 2021). Thoroughly identifying the problem can be a multi-step process where you gather relevant materials, collaborate with others, call on past experiences, and/or engage in brainstorming (Tan, 2015).

In the incubation phase, the individual taps into their unconscious mind processing the information they previously gathered linking it to prior knowledge. The individual begins to form an idea or combination of ideas that may lead to potential

solutions (Briones, 2020). The incubation phase occurs while the individual focuses on something else or altogether avoids the problem at hand.

The illumination phase, also referred to as the “aha” moment, occurs when all the stored and processed information links together to form a new idea or solution. The idea or solution will come to an individual through “flashes of insight,” (Briones, 2020).

Ultimately, this stage provides methods or ideas that might solve the problem (Ratnaningsih, 2021). This phase also occurs in the unconscious mind and can be short lived or entail a long process.

Finally, when the individual has formulated a solution, they then enter the verification phase. The individual will test the potential solution to determine the “feasibility, workability, and acceptability” of the idea to ensure it will solve all aspects of the problem (Tan, 2015, p. 163). The verification process consists of challenging and re-examining the potential solution until there is enough evidence that it is viable (Tan).

While psychodynamic approaches laid the foundation for understanding creativity in the 20<sup>th</sup> century, limited research focused on creativity until the mid-1950s, when Guilford made his APA address (Sawyer, 2017). Guilford asserted that creativity can be approached scientifically and that divergent thinking is central to creativity (Kyaga, 2015, p. 44). Divergent thinking has been defined as the ability to “merge, or combine, unusual ideas” (Kilgour, 2006), promoting idea generation and creative problem-solving.

Guilford’s research addressed four ways to think divergently: fluency, flexibility, originality, and elaboration (Griffith & Dunham, 2015, p. 136). Fluency refers to the number of ideas appropriate to the situation (Casakin, 2007). Flexibility consists of viewing a problem from numerous perspectives (Saprudin, Liliyasi, & Prihatmanto,

2019). Originality refers to the uniqueness of the ideas (Griffith & Dunham, 2015, p. 136), and elaboration considers the amount of detail associated with each response (Casakin, 2007).

The four factors of creativity and divergent thinking are what led to E. Paul Torrance's Torrance Test of Creative Thinking (TTCT). The TTCT is used to "unveil the neural substrates associated with creative thinking" (Hahm, Kim, & Park, 2019). The TTCT was the first test created to measure creativity. When the test was first published in 1966, it consisted of the four dimensions derived from Guilford's research: fluency, flexibility, originality, and elaboration (Bart, Hokanson, & Can, 2017). The test was later restructured in 1984 and flexibility was excluded due to a "high correlation" (Bart, Hokanson, & Can, p. 516) between flexibility and fluency. The restructure also consisted of adding "abstractness of titles" and "resistance to premature closure" (Bart, Hokanson, & Can, p. 516).

In 1967, shortly after the first TTCT was published, Edward de Bono expanded on Guilford's idea of divergent thinking. He wrote about lateral thinking and its relation to creativity. Lateral thinking generates new ideas while focusing on the process, not the end result (Lawrence, & Xavler, 2013). De Bono described vertical thinking as the more traditional patterns of thinking that entail a logical system, while lateral thinking generates a "broad array of interesting alternatives" (Veale, & Li, 2013).

While the 1960s provided for many revelations in creativity research, many researchers believed knowledge was limited due to the conformist society (Sawyer, 2017). Frank Barron believed that a non-conformist society would allow creativity researchers to feel free in expressing their ideas and allow for a willingness to take risks

and contradict established theories (Sawyer). Barron's assumption proved correct when in the early 1980s Chevron asked him to create a display for an exhibit that highlighted the "ingredients of creativity," (Barron, 1988, p. 77-78). The display consisted of Barron's six factors of creativity that included recognizing patterns, making connections, taking risks, challenging assumptions, taking advantage of change, and seeing in new ways (Barron, p. 78). The exhibit reached over 5 million viewers and highlighted the 18 most creative careers (Barron, p. 78). The 1980s proved that conformity was no longer an option and creativity was necessary.

**Organizational Creativity Research.** In 1983, Teresa Amabile introduced a "componential model" that suggests three key factors are influential in creative processes and products (Amabile, 1983, p. 362-366). Naturally, domain-relevant skills, or knowledge about a specific domain/field, are required for creativity to occur; however, domain-relevant skills alone will not produce creative outcomes (Amabile, p. 362-366). Creativity-relevant processes are also required. These processes consist of an individuals' cognitive styles and strategies (Reiter-Palmon & Illies, 2004), as well as personality traits that must be "conducive to independence, risk-taking, and taking new perspectives on problems" (Amabile, 2012). The third component necessary for producing creative results is intrinsic task motivation. An individual must have a passion and find enjoyment or personal satisfaction in their work (Amabile, 2012). Extrinsic motivators are associated with constraints that can be detrimental to the creative process (Amabile & Pillemer, 2012).

When the United States began transitioning to a post-industrial economy, creativity research started focusing on social, environmental, and organizational

elements. Woodman and his colleagues proposed the interactionist model where creative output was thought to be the result of the interaction between the person and the situation (Woodman & Schoenfeldt, 1990). The three components that could affect creative output are antecedent conditions, the person's characteristics, and the situation (Woodman & Schoenfeldt). Antecedent conditions call upon an individual's previous experiences, while characteristics of the person refer to cognitive abilities and domain-specific knowledge. Characteristics of the situation refer to social influences, such as one's physical environment or the organizational culture (Woodman & Schoenfeldt). While effects of personality and cognition on creativity were well-documented, the role of the environment was less known.

Not long after, Sternberg and Lubart (1991) developed the investment theory of creativity or the "investment approach to creative work," (p. 245) which defined creativity through cognitive and non-cognitive variables. The theory was then revised to include other elements like individual and environmental factors (Sternberg & Lubart, 1992). The theory suggests that the level of creativity established results from how well six resources, intellectual process, knowledge, intellectual style, personality, motivation, and environmental context, are combined (Amabile & Pillemer, 2012).

Intelligence, critical to creativity, refers to seeing problems differently or from new perspectives. Knowledge entails domain-relevant skills. To think critically about a problem, one must, of course, be knowledgeable in that field. Thinking styles, or intellectual styles, are concerned with how individuals apply their intelligence and knowledge based on the environment. Specific personality characteristics are required to sustain long-term creativity, such as "tolerance of ambiguity, willingness to surmount

obstacles and persevere, willingness to grow, willingness to take risks, and the courage of one's convictions" (Sternberg & Lubart, 1992, p. 247). Motivation focuses on an individual's intrinsic motivation or desire to perform. Creativity also requires an environment that encourages, rewards, and values new and creative ideas (Sternberg & Lubart). These up-and-coming interactionist models proposed the need to further research the interaction between individual, social, and organizational characteristics and their effect on creative output (Loewenberger, 2009).

In the late 1990s, Csikszentmihalyi proposed a systems approach to creativity consisting of three interrelated components to produce the creative output: the interaction between the individual, the domain, and the field (Loewenberger, 2009). The domain is the area or subject of study. Creative individuals are often found to choose a domain based on passion or personal satisfaction and not just to make a living. The field represents experts within a domain that determine what is accepted and recognized (Loewenberger). According to Csikszentmihalyi, creativity will not occur without constant "dynamic links of circular causality" (McIntyre, 2008, p. 2). Thus, each element plays a role in potential creative output. A creative individual with domain-specific knowledge will not be able to engage in creative processes or produce creative output without a field of experts "who recognize and substantiate that novelty" (Thompson, 2015).

Teresa Amabile published an updated version of her componential model in 1996, which suggested that while many extrinsic motivators can hinder creativity, some can enhance it (Amabile, 2012). Rewards presented as controlling are likely to hinder creative processes. Rewards confirming competence, perhaps by recognizing value, supporting an



individual's involvement in their work by offering additional resources, are likely to support creative processes. Amabile (2012) referred to this as "motivational synergy" (p. 5). Motivational synergy equally stresses the effect of social and environmental factors on creativity. Additional evidence shows that an environment that supports "autonomy, competence and task involvement can be conducive to creativity through the enhancement of intrinsic and synergistic extrinsic motivation" (Loewenberger, 2009, p. 2-46).

Socially speaking, group composition can also significantly affect creative output. Group creativity acts as an intermediary for individual creativity through social interactions. Group creativity is also said to be influenced by the diversity among group members, group characteristics, such as the size of the group and ability to work well together, group processes, such as specific problem-solving strategies, and contextual influences (Loewenberger, 2009).

When group interactions are cohesive and focus on a specific goal, collaborative creativity is likely to occur (Yu, 2020). If the group dynamics are appropriate, collaborative creativity "can yield an outcome that is more creative than the sum of individual contributions" (Yu, p. 4). The diversity among groups, incorporating people with different skill sets and knowledge, can lead to more comprehensive solutions and results. However, group settings that promote collaborative creativity are unlikely to produce creative outputs without the appropriate organizational climate and culture.

Teresa Amabile (2012) recorded several environmental factors that can either hinder or stimulate creativity within an organization. Organizations that criticize new ideas are hindering creativity (Amabile, 2012). Recall that creativity has been, in part,

defined as an original idea. If new ideas are criticized, individuals will be less likely to speak up. In turn, less original ideas are being presented to the organization hindering organizational creativity and progression. Thus, it is imperative that the organization has a climate that supports sharing new ideas, offers mechanisms for developing new ideas, and allows management to support innovation through a “creativity-encouraging vision,” (Amabile, p. 2) and recognition for creative work. While not every idea will prove to be creative and innovative, the organization must accept that they may have to filter through some less than perfect ideas to discover creative ones.

Creativity can also be hindered by political problems within an organization (Amabile, 2012). If employees are more focused on receiving recognition for their work or criticizing their colleagues’ work, they are most likely not focusing on creative processes that can enhance output. Micromanaging can also be harmful. While specific end goals need to be completed, leaders must offer some freedom or autonomy in carrying out the tasks to achieve creative output (Amabile). Furthermore, a creative organization offers a positive challenge in the workplace, which management can hinder with a low-risk outlook (Amabile).

Even when the social and organizational environments are conducive to creativity, the individual still needs to engage in producing creative output. Wallas’s four stages provided a great foundation regarding creative processes. His theory, however, was based mainly on unconscious work, which would not be acceptable in an organizational setting. In 2012, Keith Sawyer published his theory on the creative process, appropriately named Sawyer’s 8 Stages of Creative Cognition (Grilliot, 2015), focusing on a conscious effort to engage in the creative process.

The first stage requires that the individual finds the problem (Grilliot, 2015). With the U.S. economy shifting toward globalization and increased use of technology, employees are often presented with “ill-defined and ambiguous problems” (Reiter-Palmon & Illies, 2004, p. 57). Ill-defined problems are defined as problems that can be solved in many ways with multiple possible solutions. “It is this ambiguity that allows for creative solutions to arise” (Reiter-Palmon & Illies, p. 57). Thus, the first stage requires intimately constructing and defining the problem.

The second stage requires an individual acquires knowledge. An individual must possess domain-specific knowledge and continuously develop their skillset (Grilliot, 2015). Breakthroughs happen after individuals have deeply immersed themselves within their domain for at least ten years (Grilliot). The constant development within a domain allows an individual to recognize current information and search for new information (Grilliot).

The third stage entails gathering information (Grilliot, 2015). To appropriately gather information, an individual must remain open to new knowledge and remove their existing filters. They must connect the information in new ways, often requiring stepping outside of their domain (Grilliot). The fourth stage is incubation, where an individual must filter through the information they have gathered, create new combinations, and discover what information is essential. This stage is similar to Wallas’s incubation stage and often results in a moment of insight or the “aha” moment (Grilliot).

The fifth stage of generating ideas refers to systematically redesigning old knowledge and ideas to create new ideas and perceptions. Often, this will occur by incrementally combining existing knowledge until a solution occurs (Grilliot, 2015),

which leads to the sixth stage of combining ideas. Individuals with varied experiences among multiple domains will often produce more creative solutions, as they have other experiences and knowledge to draw from (Grilliot).

At this point, a creative individual will have many ideas that have surfaced. The seventh stage requires the individual to select the best idea. They will do so by evaluating all potential solutions to find the few, or one, that have the most value in addressing the problem (Grilliot, 2015). After one or several solutions have been selected, the individual enters the eighth stage, externalizing the idea(s). In this stage, the individual will share their idea(s), make it usable, and begin marketing or implementing it (Grilliot). While creative processes may differ from one individual to the next, Sawyer's eight stages of creative cognition provide a basis for the general process required for creative output.

**HRD Creativity Research.** With an understanding of the history of creativity and creativity research and individual, social, and organizational factors that affect creative processes, we must now turn our focus to the importance of creativity in the field of HRD. As previously established, an individual with creative tendencies alone will not produce a creative output. Contextual, environmental, and social aspects can significantly affect one's ability to engage in the creative process. HRD professionals are tasked with effective change management. Thus, it is the responsibility of the HRD professional to make organizational, social, or contextual changes to support the creative process.

As Teresa Amabile (1983) noted in her research, individual creativity combines domain-specific knowledge, creativity-relevant processes, and intrinsic task motivation. Individual creativity is at its peak where these three components overlap (Joo, McLean, & Yang, 2013). Thus, HRD professionals can implement training and processes and

procedures to develop these overlapping elements (Joo, McLean, & Yang). Joo et al. (2013) suggest HRD professionals focus on the Person-Environment (PE) fit theory to enhance creative outcomes. While recruiters often base their employee selection on knowledge and domain-relevant skills, there is little focus on how the individual fits the job design. HRD professionals can assist organizations in placing employees in “autonomous and challenging” positions that encourage creativity (Joo, McLean, & Yang, p. 410). For peak creative performance, employees need to be placed in a challenging but not overwhelming job. An overwhelming project or workload will cause an individual to simply get the job done instead of engaging in potentially creative solutions.

HRD professionals can also assist in leadership development to further promote creativity within an organization (Joo, McLean, & Yang 2013). Leaders, or managers, should act as coaches and ensure employees are given the necessary time, resources, and environment for creative output (Joo, McLean, & Yang.). Leaders/managers, however, are typically facing many responsibilities and not always well-informed about what their employees require for optimal performance. HRD professionals can assist in training leaders to act as coaches, provide the necessary resources yet still get the job done.

One of the most critical factors in creative problem solving is problem identification. An ill-defined problem leaves room for interpretation and allows more opportunity for the development of creative solutions. As previously noted, there is also a general process and specific techniques for creative problem-solving. Not all employees, however, are naturally familiar with problem-identification and creative problem-solving. One of the primary responsibilities of HRD professionals is learning and development,

whether through job aids, training, or other various interventions. Thus, HRD professionals can promote creativity by offering training on problem-identification and creative problem-solving techniques (Loewenberger, 2009). The training will be most effective if the HRD professional can present an actual problem within the organization in a small group setting (Loewenberger). To further enhance creative problem-solving techniques, HRD professionals should also train leaders to encourage and initiate collaborative problem-solving sessions among their employees (Loewenberger).

HRD professionals should also perform and encourage consistent performance reviews. These reviews provide an opportunity to discuss career commitment and career progressions, as well as offer a chance to clarify “creative requirement in relation to individual and team objectives,” (Loewenberger, 2009, p. 5-272). Individuals who have job security and see an opportunity for progression are likely to be more committed to their job. Employees that are satisfied with, and committed to their job, are more likely to produce creative results (Joo, McLean, & Yang, 2013). Thus, there are a number of strategies HRD professionals can employ to enhance creativity within an organization.

HRD professionals are required to “generate novel ideas, select effective strategies, [and] determine a successful mix of learning activities” (Korth, 2000, p. 30). An HRD professional cannot accomplish this without their creative processes that will assist in identifying problems and designing and developing interventions. “To design is to create some new thing of practical utility,” (Korth, p. 31). Recall that creativity has also been defined as a new idea that is both “novel and useful,” (Korth, p. 31). With design and creativity being similarly defined, it would then make sense that the process of design would require creativity and creative processes.

There has been extensive research on how HRD professionals carry out their responsibilities. When addressing an organizational problem, HRD professionals often follow a specific process. One of the most common HRD processes is the ADDIE model, a model of instructional system design, where an HRD professional first analyzes the problem or performance gap. Next, they design an appropriate intervention or create a potential solution. The HRD professional then develops the intervention and obtains all materials necessary to carry it out successfully. When the materials and instructions are complete, they will then implement the interventions(s). Last, an HRD professional evaluates the intervention and the learning (Korth, 2000). However, there has been little attention to what creative processes HRD professionals engage in to design and develop these novel interventions.

To better understand HRD professionals' creative processes, Korth (2000) conducted interviews with ten HRD professionals. Like previous creativity research, a pattern of phases for creative design emerged among the ten interviewees, including diagnosis, immersion, percolation, "aha," and checking (Korth, 2000). In the diagnosis phase, HRD professionals identify the problem, the root cause, and potential interventions or solutions (Korth). While this has been defined as primarily a "rational, logical, and collaborative" (Korth, p. 35) phase, most of the interviewees agreed that creativity is required to go beyond the problem to discover the root cause.

In the immersion phase, the HRD professional begins generating ideas for the intervention(s). This phase has been described as a more creative phase than diagnosis (Korth, 2000). The HRD professional must gather information related to the problem, conduct extensive research, and then play with all the information until they can

determine how the intervention will occur (Korth). To tap into their creativity, many of the interviewees reported that brainAaliyahing led to multiple notes. They gathered information analytically and drew upon past experiences and a wide variety of sources, both inside and outside the organization (Korth).

The percolation phase requires the subconscious to do some of the work by letting the idea rest. Instead of focusing on a solution, the interviewees stated that they would engage in different work or other activities to get their minds off the project. One interviewee stated that they often engage in other creative tasks that seem to enhance unconscious work (Korth, 2000). The “aha” phase is considered the breakthrough or moment of insight. Interviewees stated that this tends to happen outside of the formal environment, often while driving, engaging in conversation, or at home (Korth,).

In the checking phase, HRD professionals dissect the solution that came to them to determine if it will solve the problem or support the goals. While they will often search for feedback among colleagues or other HRD professionals, many interviewees stated that they typically intuition that the solution is viable (Korth, 2000). Most interviewees determined that creative processes are mainly required in the pre-planning stages. While creative processes differ for everyone, this study proved helpful in determining certain activities that can foster creative insight (Korth).

Robert Brynteson conducted a series of interviews with ten HRD professionals from the Twin Cities area. The ten subjects come from very diverse backgrounds and have been deemed creative by other HRD professionals in the Twin Cities area (Brynteson, 1997). During his interviews, Brynteson recognized several patterns that have seemingly allowed these professionals to be considered creative. First, creative



HRD professionals require empty time or time to reflect and let the unconscious mind do some work (Brynteson). They must also find their work to be “worthy of the human spirit” (Brynteson, p. 81). Creative HRD professionals must be passionate and find value in their work.

Being an intense listener and aware of one’s surroundings has allowed these individuals to engage in creative processes, particularly in group settings (Brynteson, 1997). It is also imperative that HRD professionals can find patterns and meaning from seemingly unrelated ideas or events, which can often take place in the form of metaphors (Brynteson). Relationships are considered key. By building a relationship with their clients and colleagues, they have developed trust, which allows them to engage in the risk-taking required for creative output (Brynteson).

While these studies have attempted to gain insight regarding HRD professionals’ creative process, they have merely discovered patterns that have emerged. While these patterns may be critical for an HRD professional to sustain creativity, the research has not addressed how HRD professionals first develop the factors that allow them to be creative. For example, when an HRD professional enters the field, do they naturally recognize patterns that most others do not see? How did these creative individuals learn that they need to make a mess of their desks, bury themselves in sticky notes full of ideas, then walk away for a breakthrough to occur? Are creative HRD professionals just naturally creative? Did a mentor guide them, or did they have to work to produce creative insight? This paper further explores how creative processes are developed among creative HRD professionals in greater detail.

## RESEARCHER'S POSITIONALITY STATEMENT

It is important to consider the assumptions and biases of researchers. Qualitative research requires that the researcher acts as the main instrument of data collection and analysis. Thus, the researcher has the potential to impact the study by influencing the participants and/or the environment in which the study is conducted. Instead of working to eliminate potential biases, "it is important to identify them and monitor them" (Merriam, 2009, p. 15) in order to determine their effect on data collection and analysis. Therefore, a positionality statement has been included to alleviate any concerns of bias.

**Briana Mesick** I grew up in a northern suburb of a large Midwest city. After completing high school, I spent one semester at a private university. With little guidance or support from the institution and my immediate family, my time at the private university was short. Needing to work full-time, I dropped out of the university and began working in the auto industry. During my ten years in the auto industry, I engaged in many training and development (T&D) initiatives. Some of the training was online and self-paced, but many of the training courses were live and conducted by T&D professionals. In 2018, I quit the auto industry and enrolled in a community college where I later received my associates degree in general studies.

After completing my associates degree, I enrolled in an undergraduate program with a declared major in Human Resource Development. I was then accepted into the University Honors Program where I adapted several Human Resource Development courses to further my experience and knowledge as it relates to HRD. While I have not yet obtained my bachelor's degree, it has become apparent that both employees and students require support and performance aids to reach their maximum potential. After

obtaining my degree, I intend to join an organization as a T&D professional where I can provide employees with the tools and resources necessary to reach their maximum potential.

## METHODS

This study investigated how HRD professionals conceptualize and practice creativity to produce successful training and development (T&D) interventions. The research utilized a constructivist epistemological approach, which assumes “that reality is socially constructed” (Merriam, 2009, p. 8). This approach allowed the researcher to gain insight regarding each T&D professionals’ creative process through their individual accounts and interpretations. This study used a qualitative research case study approach. Qualitative inquiry has a rich history as it is used to explore “how people interpret their experiences” (Merriam, 2009, p. 5) and the meaning they derive from it.

Case study methodology was used for this study. Merriam (2009) defines a case study as “an in-depth description and analysis of a bounded system” (p. 40). Case study research relies on determining the boundaries of what is to be studied, where the “what” is the bounded system. The researcher’s study focused on T&D professionals’ experiences, which is the bounded system. Furthermore, the researcher followed the descriptive case study approach. The descriptive case focuses on thick rich “description of the incident or entity being investigated” (Merriam, 2009, p. 43). This approach allowed for an in-depth analysis of the creative process “using a variety of data collection procedures” (Creswell, 2014, p 14).

**Site and Sampling Selection** The researcher interviewed research participants virtually for this study. The primary criteria for inclusion as a research participant for this

inquiry was that they have been working in a T&D context in an organization. The study employed snowball sampling to gather participants. The researcher reached out to a few former colleagues that met the criteria for the study. These participants were asked to refer the researcher to other T&D professionals who might qualify as participants for the study (Patton, 2002). The researcher solicited participation from at 8 participants from diverse background. All research participants were made aware that their participation in the study was voluntary and that they were free to withdraw at any time. Participants were not compensated for their time. They were asked to pick pseudonyms, so they were not identified in the study. Participants from early, mid, to late career and provided a few different artifacts as is shown in Table 1. A majority of the artifacts were related to a T&D process.

Table 1. *Research Participant Information.*

Pseudonym	Years of Experience in Industry	Artifact
Susan	20	Kirkpatrick model
Sarah	12	Personal Notes
Nova	12	N/A
Aaliyah	3	Ropes Instructional document
Shaunda	26	N/A
Maria	18	ADDIE Model document
Debbie	35	HPT process document
Michael	18	Creativity Inc. book

**Data Types and Analysis** The researcher collected two types of data for this qualitative case study. The primary method of data collection was individual semi-structured interviews. The semi-structured interviews allowed the researcher flexibility “to respond to the situation at hand, to the emerging worldview of the respondent, and to

new ideas on the topic” (Merriam, 2009, p. 90). The interviews elicited the T&D professionals’ experience with the creative processes required for successful interventions. Prior to conducting the interviews, each participant was provided with an overview of the study. Each participant was asked to sign a consent form and reminded that their participation was completely voluntary. Each interview was approximately 60-90 minutes in length. Interviews took place via videoconferencing or phone, based on the participants preference Interviews were recorded and transcribed by the researcher.

The secondary method of data collection was individual artifacts. Individual artifacts refer to those items “written, visual, digital, and physical material relevant to the study at hand” (Merriam, 2009, p.139). The artifacts that were provided by participants provided another perspective for thinking about how creativity is fostered and practiced by T&D professionals. Approximately three-quarters of respondents provided examples of artifacts during the interviews. Half of the participants provided an artifact related to T&D processes. Process related artifacts included a document referencing the ADDIE model, human performance technology, ROPES instructional planning, and evaluations based on Kirkpatrick’s model.

Merriam (2009) states that the preferred method of analyzing data in a qualitative study is to “do it simultaneously with data collection” (p. 171). Thus, the researcher began analyzing the data upon completion of the first interview. The recorded interviews were used to transcribe the responses, then coded to organize the responses and, later, used to recognize emerging themes. The analysis began with “identifying segments” (p.176) of the interviews that pertained to the underlying research question. Data went through three rounds of coding to refine emerging themes (Saldaña & Omasta, 2018).

The first round of coding consisted of category construction and recognition of key terms. Each additional round of coding was used to refine themes until a clear understanding of the phenomena was reached.

Trustworthiness is a critical factor in establishing qualitative research.

Trustworthiness has been defined as “the degree to which the reader can assess whether the researchers have been honest in how the research has been carried out and reasonable in the conclusions they make” (Pratt, Kaplan, & Whittington, 2020, p.2). Therefore, the researcher employed several methods to ensure trustworthiness of the findings. First, the researcher incorporated member checking. Member checking refers to “taking the final report or specific descriptions or themes back to participants and determining whether these participants feel that they are accurate” (Creswell, 2014, p. 201). Thus, when the research participants were sent the interview transcript, they were given the opportunity to review and revise it for accuracy. Out of the 8 participants, only one changed the wording of a single sentence to better reflect their perspective.

Next, the researcher established trustworthiness through transferability, by providing a “rich, thick description” (Creswell, 2007, p. 209) of the study participants’ experiences (Merriam, 2009, p 227). Transferability is established when the reader can relate the findings of the study to a similar setting or context (Merriam, 2009). The researcher described in detail the participants and their process of developing and implementing creativity to create successful interventions to establish transferability.

## FINDINGS

The research participants offered valuable insight regarding the creative processes required to create successful interventions. The data analysis phase yielded themes

important for understanding the phenomena under investigation. The themes that emerged during the data coding process were organized into three components: 1) obtaining collaborative feedback, 2) design autonomy, and 3) drawing on past experience.

**Theme 1: Obtaining Collaborative Feedback.** A majority of research participants cited obtaining collaborative feedback as a primary source of inspiration for developing the creativity required to produce successful interventions. This appeared as eliciting feedback from colleagues, managers, other individuals in the field, and even friends and family. Susan, a seasoned corporate training and development (T&D) professional, seems to rely strictly on current colleagues for feedback stating “trainers are not on an island. If I’m stumped and not quite sure how to approach something, I can certainly collaborate and solicit thoughts from my colleagues.” Aaliyah, who has been in the field for a few, short years, cited a time that collaborating with a co-worker helped develop a solution. While working on a project Aaliyah stated “me and my co-worker were sitting there, and we both had similar ideas, but they were only part of solution. When we came together and started talking about it, we realized that both of our ideas created a whole.” Thus, many T&D professionals rely on collaborative feedback from colleagues to successfully develop their interventions.

Several research participants noted the importance of collaborating with professionals outside of their organization. Sarah, a manager of people development, stated “I rely really heavily on my peers and colleagues from previous work environments.” Nova, with over 12 years of experience in the field, corroborated this sentiment by stating “It is also good to draw on your network and people from another

organization that might be in a similar role or have received learning interventions that work very well for them.” While collaborating with colleagues is useful, many T&D professionals also find that obtaining feedback from those outside of their organization invokes creativity.

A few participants cited receiving collaborative feedback from friends or family. Debbie, an experienced HR Manager, noted “If I can’t find something that I already know or something that I can apply, that’s when I am going to go to my husband or daughter and say ‘okay, this is the problem. Help me think about what might be a solution.’” Other participants were less selective about their source of collaborative feedback. Michael, with 18 plus years of experience in Learning and Development, noted “If you get feedback from the same people, you’ll get the same feedback. So if I want to get something new and creative going, I need to show it to somebody else and get feedback from them.” Obtaining feedback from friends/family and multiple sources can provide for diverse perspectives that will enhance the creative process.

Overall, a majority of the participants cited collaborative feedback as a required element for developing their creative process. Shaunda stated, “I may have an approach, but you have to discuss and talk through and collaborate on what makes most sense.” Michael supported this point of view stating that creativity is required to build on something or improve an idea and “really doing that by bouncing things around with other people.” Thus, T&D professionals newly entering the field should seek out feedback from multiple sources to develop the creative process required for successful interventions.



**Theme 2: Design Autonomy.** The second theme that emerged among research participants is having the freedom to determine the design of the intervention. Participants noted the importance of being able to decide when to include activities and quizzes, how to incorporate media, and design the instruction so it appeals to all learning styles. Design autonomy evokes the creativity required to keep learners engaged and retain information. No matter how the research participants utilize creativity in the design process, they agreed that creativity must be applied to provide the learner with a valuable experience. Sarah uses her creativity to design training that appeals to all of the senses stating “My concept of creativity is that it is really important we engage the learners as much as possible using most of their senses. In other words, they have to see, they might have to hear the facilitator talking, they have to touch, so there’s a variety of things to get them engaged so they’ll remember it.” Thus, design autonomy allows the T&D professional the creative freedom to keep learners engaged using multiple modes of delivery.

Being able to manage variety in design was not only cited as being important in terms of delivery, but also in terms of segmenting learning material. Nova noted that “The creativity piece comes into either designing games, exercises, role plays, whatever activities you use, whatever stimulus you use. There is a creative piece to all of that, the way it looks, the way it reads, and an understanding of how people absorb information.” Debbie agrees that design autonomy is critical in making a lasting impact on learners stating “What is a creative way to teach this to people? What’s a fun game I could do or some kind of activity that would get the idea across that’ll be memorable?” As such, creative freedom to determine the design of an intervention in terms of exercises,

activities, and games has been noted as a critical component to creating successful interventions.

Michael emphasized the importance of creativity throughout the design process. He cited creativity as a vital aspect for both material and engagement. “When I’m developing training and building material, that’s where I can use creativity. Do I want to use a stock image or do a new image myself? Am I going to use text here? But it’s not just about imagery, it’s not just about media. It can be about the design of the problem, as well. What are the activities that you’re going to have to have students engaged? How are they going to interact with the content?” Focusing on the learner allows a T&D professional to employ the creativity required to effectively design and deliver an intervention.

Maria, an HR Generalist that specializes in T&D, noted that her creative inspiration is drawn from “understanding the learner” and “what they’re looking for and what they want to learn.” Maria stated that when she puts herself in the learners’ shoes, she can better determine where to incorporate breaks, games, activities, quizzes, etc. Her primary focus is to have the autonomy to choose a design that will keep learners engaged and allow them to take something away from the training. During longer training sessions, it is key to “take breaks, throw in discussions in the middle of it” and include interactive activities like games. Having gone through many training sessions that were “boring” her focus is to creatively design the intervention to satisfy the learner. Overall, design autonomy allows T&D professionals to utilize their creativity to create interventions that engage the learner for long-term retention.

**Theme 3: Drawing on Past Experience.** The final theme that resulted from this study is drawing on past experience. Nearly every participant cited utilizing past experience, both successes and failures, as an inspiration for creativity in creating successful interventions. While some T&D professionals focus solely on their experience as a professional, some consider previous experiences with interventions as a learner. Overall, a majority of experiences that evoke creativity took place in a professional setting. Susan stated “When I think back on my methodology classes in college, I don’t necessarily remember some of those components. I probably learned more through experience.” While education provides for a great foundation, T&D professionals largely learn from their experiences in different organizations.

Sarah also cited previous work experience as a primary contributor to her creative process. “I look back at some of my previous roles and really kind of dig into things that worked well for me from a training perspective. Then also taking a look at those things that maybe didn’t work so well for me and try to understand why they weren’t successful.” Understanding why an intervention was unsuccessful can elicit the creativity required to develop a more effective intervention. Shaunda also relies on previous successes to creatively develop new interventions. “I am tapping into what has worked in the past.” Overall, successes and failures from previous interventions can invoke the creativity necessary to make effective changes to new interventions.

Sarah noted that some of her greatest inspiration for creativity came through failures. “I think some of the most valuable experiences I have had throughout my career are based off mistakes that I have made and ways that I have overcome them.” Michael, however, agrees that building on past experience evokes creativity and uses it as a

platform for growth. “If you’re not invoking creativity, you’re really not moving forward, you’re really not building on what you’ve done in the past. Without it we’re stagnant.”

While many of the research participants tend to call on their experience as a professional to invoke creativity, some rely more heavily on their experiences as a learner. Sarah, for example, draws on positive experiences she has had as a learner. “I think about some of my favorite training sessions and the way that the speakers and the leaders of some of those were able to captivate my attention and really draw me into this training.” Positive past experiences will allow a T&D professional to creatively implement similar methods into their intervention. Maria, however, uses her negative experiences to invoke creativity that’ll produce more effective interventions. “It’s about going through my own experiences and considering training programs that I’ve gone through as a learner. I’ve gone through so many and, honestly, so many I didn’t pay attention to. Either it was boring, or it was too long, or I just lost interest.” Thus, both negative and positive past experiences were vital in developing the creative process required to produce successful interventions.

## DISCUSSION

Creativity has been noted as a critical element to developing successful training and development (T&D) interventions. Research has shown that creativity is a required elements in terms of problem identification (Loewenberger, 2009), which is a critical component in the analysis phase of creating an intervention. It has also been established that creative T&D professionals engage in phases when developing an intervention (Korth, 2000). While research addresses creativity as a required element for T&D professionals, there is little to no research available on how T&D professionals develop

the creative process required to create successful interventions. This study was designed to address a gap in creativity research as it relates to T&D professionals' creative process. The data collected from the study allowed the researcher to further explore how T&D professionals develop the individual creative process that assists in creating successful interventions.

The information gathered from research participants in this study can be used to prepare T&D professionals newly entering the field for their role. "On average, the time for new hires to achieve full productivity" took about "20 weeks for professionals" (Rollag, Parise, & Cross, 2005, p. 35). Engaging in practices that successful T&D professionals utilize to promote creativity can allow for increased productivity. When entering a new role, individuals may often want to work independently to prove they are capable. This study, however, has shown that as a T&D professional, collaborative feedback is key. T&D professionals first entering the field can, thus, benefit from collecting feedback from past and present colleagues, as well as friends and family upon first entering the field.

Upcoming T&D professionals can also prepare for their new role by understanding the importance of design autonomy. Most importantly, T&D professionals should focus on creating an intervention aimed to engage the learner. This can be accomplished by considering past experiences in terms of successes and failures, as well as experience from the learners' perspective. Furthermore, managers can benefit from this research by loosening restrictions in terms of design in order to allow T&D professionals the design autonomy required for creative output.

It can also be useful for T&D professionals just entering the field to consider their previous experiences to inspire the creativity required for successful interventions. While someone just entering the field may not have experience to call on in terms of successes and failures of prior interventions, they can call on their experiences from a learner's perspective. Analyzing your own positive and negative experiences as a learner can assist in invoking the creativity required for successful design and development of an intervention. While the themes that have emerged from this study in terms of the creative process will not guarantee successful interventions, it provides a framework for the key factors that have inspired creativity in T&D professionals that are successful in their field. Application of these themes in an organization setting can likely promote development of the create process that will lead to more successful T&D professionals, thus enhancing an organization's human resources.

## CONCLUSIONS

The findings from this qualitative study demonstrate that training and development (T&D) professionals require collaborative feedback, design autonomy, and drawing on past experiences to stimulate the creative process required for successful interventions. T&D professionals are tasked with the design and development of interventions based on an organization's needs.

**Implications for Practice.** Based on the study's findings, an organization that promotes creativity is an important consideration for T&D professionals first entering the field. An organization that does not promote creative practice likely will not provide the autonomy required for collaborate feedback and independent decision-making in terms of design. Restricted independence will then limit the quality of experiences a T&D

professional can draw from. As such, the organization-person fit is a key element in the development of the creative process.

Furthermore, time constraints must also be considered in terms of designing and developing an intervention. Projects that have a strict timeframe may require a T&D professional to actively guide the creative process. While one might engage in the process of collaborative feedback as they find themselves stuck on a project or requiring assistance, a strict timeframe for a project may require that a T&D professional engage in this process sooner to collect feedback before a problem can arise.

**Implications for Research.** This study explored T&D professionals' experience with developing their creative process to create successful interventions. Specifically, this study focused on T&D professionals at all different points in their career and from a variety of organizations. The results allowed for a comprehensive analysis of participants' shared experiences with the development of the creative process required to create successful interventions. Based on limitations of the study, several suggestions for future research are provided.

First, a similar study should be conducted that focusses on the development of the creative process utilized by T&D professionals based on the size of the organization. It is possible that creative autonomy may be more prevalent in larger organizations that can allow employees to take more risks. Conducting a study based on the size of the organization will allow research to determine if the size of the organization affects the ability to practice creativity.

Second, a qualitative research study that examines the development of the creative process for T&D professionals should be conducted. Specifically, a study focusing on

organizational culture should be conducted. Such research would allow for an analysis of how organizational values and practices effect employees ability to utilize their creativity.

Finally, a quantitative study that explores the development of the creative process for T&D professionals should be conducted. A quantitative study would allow for a larger number of research participants, thus providing for more generalized results. Having a more thorough understanding of the development of the creative processes required to create successful interventions, would be a valuable addition to the field of scholarly research. Further research based on these suggestions would contribute to a deeper understanding of the creative process. For those new to the field, it would allow T&D professionals further enhance their skills and abilities. For those with prior T&D experience, it would offer an opportunity to continue refining their skills for scholarly practice.



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