Using ELVIS to Measure Experiential Learning in Criminal Justice Internships

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ABSTRACT

The purpose of this study is to better understand the relationship between criminal justice internships and knowledge domains. Kolb's four experiential learnings stages of experience, reflection, abstract conceptualization, and active experimentation are assessed using the Experiential Learning Variables and Indicators Scale (ELVIS) to provide a composite measure of 700 monitoring reports received from 101 student interns at a Midwestern university. A Pearson correlation coefficient is calculated to assess the relationship between each ELVIS characteristic, gender, and overall score. Data indicate students experienced levels of physical, emotional, and intellectual risk-taking while completing field-based activities. However, few opportunities existed for students to practice applying new concepts to situations during their internship. Moreover, the locus of control in defining internship activities was markedly a function of the host agency. Anecdote collected from monitoring reports is provided to deliver additional insight into students' experiences via a phenomenological method. An agenda for future research is suggested.

Keywords: internships, Kolb's experiential learning theory, experiential learning variables, impact scale (ELVIS)

INTRODUCTION

The application of experiential learning in the applied social sciences is most evident when academic programs include opportunities for students to complete internships. The guiding principle and belief is that internships extend teaching beyond the classroom to real-world settings. Students learn through direct participant observation rather than learning through indirect presentations of the setting such as textbooks or lectures. Internships are intended to move beyond mere field exploration into a dynamic learning experience for students that fosters critical thinking, encourages collaboration, and promotes identity development.

In post-secondary education, internships are a regular feature of core curricula in criminal justice academic programs. It is estimated that nearly 90 percent of all undergraduate criminal justice programs throughout the country either require or allow internships (Stichman & Farkas, 2005). Behind the movement to infuse internships into curricula is the awareness that integrating theory into field practice is an essential function of education (Ciofalo, 1992). This perspective is reinforced by the Academy of Criminal Justice Sciences (ACJS) through its program certification, a peer-review process that uses a set of criterion-referenced standards designed for quality and effectiveness in criminal justice education. In a directive associated with the self-study document for certification, standard B.8 provides that "Programs have elective internship opportunities available to upper-level students. Measures are taken to ensure that internships are integrated into the academic component of the program and related to educational objectives" (ACJS, 2015, p.4).

The benefits derived from an internship experience are well-documented, mostly pointing to educational and work placement advantages for the student. Students benefit foremost by learning actual practices under the guidance of a practitioner, which allows the student intern to appreciate the challenges of the job and thereby make informed decisions on their career choices (Ross & Elechi, 2002). The internship also allows students to make valuable contacts for future employment and helps ease the transition from school to the criminal justice workplace (Stone & McLaren, 1999).

Field-based internships can also lead to benefits for host agencies and the university. The most obvious benefit for the criminal justice agency is that internships serve as a tool for screening applicants for hiring and recruitment. Since most student interns are not paid, the monetary costs to the host agency is minimal. With regard to benefits to the university, interactions between the academic program and host agency allow faculty members to stay contemporary with the latest developments in the field (Stickman & Farkas, 2005; Stone & McLaren, 1999). It also promotes community involvement and service, which is a function of the mission statement for nearly all universities. Lastly, positive relationships can have a ripple effect when criminal justice agencies employ college students as a result of their internships, which in turn translates into better recruitment and prestige for the university.

Experiential Learning

From the beginning of the experiential education movement, the importance of integrating the experience with previous learning has been paramount. Faculty members who supervise student interns generally agree that successful internship programs promote knowledge application and intrinsically test whether experiential learning allows students to better understand previously learned material (Parilla & Smith-Cunnien, 1997). Integrating academic with experience-based knowledge is undeniably a core value of most criminal justice internship

programs. Some scholars advocate that student internships must go beyond application to provide knowledge acquisition. They contend that field-based experiences for students should provide both work-related experiences and concrete knowledge (Shure, 2001). Finally, it has been suggested that internships should endeavor to allow students with opportunities to apply theory to matter-of-fact situations (Daugherty, 2001).

Building on the intellectual origins of the experiential works of Dewey (1938) and later evolved in work by Piaget (1950), Kolb developed experiential learning theory (ELT). ELT elaborates specifically upon the manner through which experiences and processes contribute to learning. From Kolb's perspective, reflection as a process and activities as experiences are aspects central to learning. In ELT, learning is defined as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984, p. 41).

Kolb's model illustrates the four stages of learning from experience: concrete experience, reflective observation, abstract conceptualization, and active experimentation. According to Kolb, learning is a continuous process where the participant acquires knowledge from each new experience. Depending upon the situation or environment, the learners may enter the learning cycle at any point. In this context, a student intern would be expected to move from one stage to the next making sense of the experience and relating it to what he or she already knows. When applying Kolb's four-stage cycle to expected learning for student interns, the process includes:

- Concrete experience (experiencing): Learning from specific experiences, student interns becomes immersed in learning followed by,
- Observation and reflection (reflecting): Observing by viewing the environment from different perspectives, student interns note their reactions to the experience, which lead to,
- Abstract conceptualization (thinking): Understanding the nature of the situation, student interns describe the experience from a conceptual rather than descriptive perspective which lead to, and
- Active experimentation (acting): Having the ability to influence people and events through action, student interns apply the new understanding of concepts to another situations.

Reflection as the Cornerstone of Experiential Learning

Connecting theory with practice requires students to actively engage in independent, self-directed learning (Ash & Clayton, 2009; Stichman & Farkas, 2005). A common element found in the literature addressing experiential learning is how reflection helps students to gain more meaning from their experiences and serves to represent an indication of the learning process that occurs. The nature of reflection can be described as a "metacognitive process that involves thinking about the thoughts that occur" during or after a situation (Padden, 2013, p.410). Some of the earlier research on experiential learning activities shows how reflection can be one of the most important variables in measuring the transfer of knowledge that occurs during the learning process (Eyler, 2002). Stickman and Farkas (2005) found support for the importance of reflection in a survey of approximately one hundred criminal justice programs. Their findings highlighted the value of college internships, but also suggested a need to look more closely at the academic portion of field-based learning through the "reactions and reflections" that provide

critical information about how academic knowledge and experiential learning merges (Stickman & Farkas, 2005 p. 163).

Reflection is a powerful form of self-assessment. When a group of scientists from the National Science Foundation discussed the transfer of knowledge in learning, they highlighted self-assessments through reflection as a way to gain a better understanding of how individuals participate in the process of learning (Mestre, 2002). Not only can knowledge be transferred during reflection, but the act of reflecting can create additional questions that allow the acquisition of knowledge to continue even further, as noted in research on integrative learning (Wozniak, 2013). Guided reflection methods can provide some of the best opportunities to transfer knowledge and promote critical thinking for students (Padden, 2013). This was highlighted by the National Society of Experiential Education (Welch, 1999) and later supported in discussions about the features of a reflection model in a service-learning program (Ash & Clayton, 2004).

Reflection not only encourages a deeper analysis and integration for the student, but it can provide a means for assessing student learning and educational outcomes (Rickards, et al., 2008). An example of this can be found in a student, faculty, and community service-learning experience within a language program that utilized reflective-based measures to assess the student learning that occurred (Bettencourt, 2015). But in order for reflection to be solidified as an avenue for the transfer of knowledge during experiential learning experiences, there has to be evidence that learning does, in fact, occur during reflection. Being able to measure and assess the actual pathways of learning within experiential learning experiences is critical to fostering the learning process during such experiences.

Methods of Assessing Experiential Learning

Many of the developments in studying experiential learning during the past 30 years have been in terms of recognizing the importance of individuals and institutions utilizing this newer philosophy of learning, and investigating the various experiential activities that can be incorporated into education such as service-learning programs, project-based programs, or internships (Fowler, 2008; Jarvis, 2004). Fewer investigative studies have been conducted to actually create instruments that can evaluate the learning outcomes from experiential learning, despite widespread acknowledgement of the significant value of experiential learning and the diverse range of outcomes that can result from this teaching and learning approach (Gosen & Washbush, 2004). There is growing recognition that internships, as one of the most common forms of experiential learning, need to "adhere to the learning principles upon which its inherent legitimacy is based" (Katula & Threnhauser, 1999, p.248) and that the development of research instruments addressing teaching approaches and learning outcomes in experiential learning activities like internships is necessary (Gosen & Washbush, 2004).

While a number of narrative data-analytic approaches might provide a measurable link between internship activities and experiential learning, the researchers chose to apply the Experiential Learning Variables and Indicators Scale (ELVIS). ELVIS is a research-based, Likert-type tool design to evaluate experiential learning programs. It was developed at the Experiential Science (XSci) Education Research Collaborative of the University of Colorado Center for STEM Learning. ELVIS synthesizes many of the best known and well-researched models for experiential learning over the past 70 years and abbreviates them down into a very practical instrument for use by educators, instructional designers, evaluators, researchers, and learners (XSci, 2015).

A description of the seven characteristics of experiential learning featured in ELVIS is provided in Figure 1 (Appendix). Each characteristic can be scored separately or in combination to yield an overall ELVIS score. Cumulative ELVIS scores below 14 are considered low while scores above 28 are considered high.

The purpose of the present study is to better understand the relationship between criminal justice internships and knowledge domains. Kolb's ELT model figures prominently in the design because the cyclical transition of learning through observation, reflection, and acting is germane to the learning processes inherently found in most internships. Ideally, when student interns engage in participant-observation activities that allow for the acquisition of knowledge and reflection upon its application, a link is forged between the current experience and prior learning. Also, by definition, experiential learning "places the locus of control and focus of the process directly within learners" (McLain, 2014a, p.199).

In evaluating the experiential learning of criminal justice students, researchers were interested in addressing three interrelated questions.

Research Question 1: In which of Kolb's ELT stages do criminal justice interns typically function?

Research Question 2: Do interns generate meaningful, relevant insights from their experiences?

Research Question 3: Do criminal justice internship agencies allow students to actively create and participate in new experiences?

METHODOLOGY

Background

The present study is part of a larger effort by researchers at a Midwestern university to determine the most salient features associated with successful job placements of criminal justice graduates. The criminal justice program is sizable, with 400 undergraduate majors pursuing bachelor degrees in law enforcement, corrections, and security administration. The internship course has been modified over the years and includes a 2007 revision that placed greater emphasis on multiple methods of assessing student learning outcomes. Currently, students complete at least 240 contact hours in an approved assignment with a criminal justice-related agency, submit bi-101weekly reports, and complete a final program summary document. Students receive feedback throughout the internship by a criminal justice faculty member who also makes intermittent visits to the internship site. Mid-semester and final evaluations are completed by the host agencies.

Sample

A homogenous, purposive sampling method was used to identify only those who had completed a criminal justice internship between January 2012 and May 2015 (Ritchie, Lewis & Elam, 2003). The criterion used was their enrollment in CJ470 (security administration), CJ480 (corrections), or CJ490 (law enforcement). These students completed their 240 internship hours in one or two semesters; the number of hours was not a utilized measure for this study.

The researchers identified and gathered student internship reports generated between January 2012 and May 2015. During this time period, a total of 700 monitoring reports were

submitted by 101 student interns. All of the students were criminal justice majors, of mostly senior status (i.e., a minimum of 85 hours academic credit hours), and considered in good academic standing. With more than 90% of graduating criminal justice students having completed an internship, data collected in this study is representative of the criminal justice student population. For the purposes of anonymity for both the student and the location of the internship, ID numbers were provided for each student and the location of the internship was not included. The only indicator of type of agency were the labels law enforcement, corrections, and security. Fifty-three percent of the interns were male (53 students); two-thirds of the students were enrolled in a law enforcement internship (66 students). Eight percent (eight) of the students completed their internship in security administration; the remaining 26 interns were placed with corrections agencies. When split by gender, the majority of internships remained in law enforcement, including 26 of the female (54 percent) and of the 41 male students (77 percent). A greater proportion of male students completed an internship in security administration than female students. No information on race or ethnicity was collected, as the majority of the students in the program were white.

Design and Procedures

The current research uses a post-test only design. Although pre-tests in the form of a reflection regarding what the students hope to experience in the internship would have allowed for the differentiation between general attitudes and attitude changes based on this particular experience, these were not conducted during the semesters in which the data was collected. To further explain the experience of the interns, phenomenological methods were used to identify anecdote from the intern's reports (Creswell, 2013). Monitoring reports submitted over the course of a sixteen-week semester were used to gain insight into their experience interning in various agencies (Babbie, 2010; Creswell, 2013; Laverty, 2003; Ritchie, Lewis & Elam, 2003).

Researchers reviewed the monitoring reports for each student. ELVIS was applied to determine the extent to which each was provided an experiential learning internship. This included seven measures, which were summarized to create an overall score; the higher the score, the more experiential the internship.

Measures

The seven characteristics used to measure experiential learning are those included in ELVIS (McLain, 2014b). The scale provides a continuum of experiential learning experienced by the student, from low to high. Each of the indicators has five points; low = 1 thought high = 5. ELVIS provides the user with guidance on what these points should look like at 1, 3, and 5.

Locus of control is the first indicator of learning, which is defined as the "the degree to which control over the learning experiences does or does not reside with the learner", which ranged from educator driven (1) to learner driven (5) (McClain, 2014b, p. 9). Physical involvement was used to examine the extent to which the internship was interactive, ranging from sedentary (1) to completely hands on (5). The internship should provide an opportunity for the students to contribute to their own learning. This was measured on a scale of being talked to (1) through problem based learning (5).

Social and emotional involvement in learning is defined as the experience going both the head and the heart. This ranged from the intern feeling isolated (1) to collaborative (5). Narrative

transport is linked closely, measuring the extent to which the student leaves the experience with a great story, with full immersion being the highest score. Internships should provide the opportunity for a student to try something new and fail. McLain suggests that it is essential to foster a feeling of confidence in the student (McLain, 2014b).

Finally, embedded reflection measures the extent to which the students reflect and shared their experience. This should be present throughout the entire internship. No reflection was allotted one point; highly structured reflection was provided a five. The amount of reflection ranged from extensive to little; reports with only a log and no reflection with which to apply ELVIS were excluded from the dataset.

The score on each of these characteristics are combined for an overall ELVIS score. Scores below 14 are considered low. Scores over 28 are considered high. Those falling between are considered normal for experiential learning.

Analysis

Table 1 includes the mean scores for the entire group of interns, and breakdowns by gender. An independent-samples t-test was conducted to compare characteristic and overall scores for male and female students. There was not a significant difference in the scores between genders.

Table 1. ELVIS - Average Score

	Overall	Female	Male
Locus of Control	2.38 (.94)	2.29 (.97)	2.45 (.91)
Physical Involvement	3.55(.94)	3.48 (.97)	3.62 (.92)
Intellectual Involvement	3.05 (1.02)	2.87 (.99)	3.19 (1.03)
Social and Emotional Involvement	3.33 (.85)	3.23 (.77)	3.42 (.90)
Narrative Transport	3.25 (.94)	3.19 (.91)	3.30 (.97)
Perceived Risk	3.27 (.98)	3.17 (.95)	3.36 (1.00)
Embedded Reflection	3.02(1.00)	3.00 (.97)	3.04 (1.06)
Total	21.84 (5.17)	21.25 (4.84)	22.38 (5.44)

With the exception of locus of control (2.38), each characteristic had a score of three or greater for the overall sample. The same pattern was found for male students. Female students had a low locus of control, but also had less than average intellectual involvement in their internships (2.87).

Physical involvement was scored highest for the group overall (3.55), as well as for each gender (3.48 for females, 3.62 for males). Females scored lower than males on this and all other characteristics. The closest score between the genders is embedded reflection, with a .04 difference in average scores. The overall score fell within the average range for experiential learning (21.84). Female student's overall score fell below this (21.25), while the male students were approximately .5 of a point higher (22.38).

A one-way between subjects ANOVA was conducted to compare the scores on overall and for each characteristic in law enforcement, corrections, and security administration interns. There was not a significant difference in mean scores between the three groups. This indicates

that regardless of the choice in internships, the student was getting essentially the same experiential learning.

Though not significantly different, it is notable that those students with corrections internship had the greatest mean overall score. The interns at law enforcement agencies had the lowest scores for embedded reflection. Perceived risk was lowest with security interns, by more than a third of a point difference than the other two concentrations.

A Pearson product-moment correlation coefficient was computed to assess the relationship between each ELVIS characteristic, gender, and overall score. Table 2 includes the correlation between the characteristics, gender, and overall score. Gender did not have a significant relationship with any of the characteristics or the overall score.

There were positive correlations between each of the ELVIS characteristics and the overall score. An increase in one characteristic was positively related to the increase in other characteristics. Locus of control was most strongly correlated to intellectual involvement (r = .700**) and narrative transport (.562**), indicating that students who had a greater ownership in their experience were more likely to be involved intellectually and tell a better story about their experiences. Physical involvement was most strongly correlated to perceived risk (.555**) and narrative transport (.553**), as was intellectual involvement (.695** and .640**, respectively). Social and emotional involvement had the strongest correlations with narrative transport (.685**) and embedded reflection (.553**). This relationship may seem intuitive, as the greater one involves their whole self in the experience, the better they will be able to reflect upon and tell a story about it. Finally narrative transport was highly correlated to perceived risk (.600**) and to embedded reflection (.625**).

A pattern emerges, where narrative transport is highly related to all other characteristics. It may be that those who have turned in better reports (i.e. those where more information was found to gather information for a score) were those who were penalized by the internship coordinator for poor reports. This does not necessarily indicate that those interns with less information provided in their reports were provided less experiential learning opportunities.

Table 2. Correlations: ELVIS Characteristics, Overall Score, and Gender

	Physical Involvement	Intellectual Involvement	Social and Emotional Involvement	Narrative Transport	Perceived Risk	Embedded Reflection	Gender (1 =male)
Locus of Control	0.339**	0.700 **	0.372**	0.562**	0.555 **	.235 *	0.086
Physical Involvement	-	.500**	.533**	.553*	.715**	.387**	0.076
Intellectual Involvement	-	-	.533**	.640**	.695**	.415*	0.144
Social and Emotional Involvement	-	-	-	.685**	.531**	.552**	0.11
Narrative Transport	-	-	-	-	.600**	.625*	0.061
Perceived Risk	-	-	-	-	-	.440**	0.098
Embedded Reflection	-	-	-	-	-	-	0.019

Results

The results are outlined by the topics presented in Kolb's model of experiential learning. The first of these is concrete experience, which is the extent to which the intern is immersed in his or her experience. This was captured by the physical involvement characteristic of ELVIS, which was the characteristic with the highest average in the entire sample. It appears that interns are often presented with a multisensory and active experience (mean = 3.55). They are given direction and are able to do a task, rather than only shadowing.

One female law enforcement student was provided with the opportunity to go to the shooting range. She reported, "The instructors there taught me how they hold their handguns and how to properly shoot. I had the opportunity to shoot several rounds the entire morning." A male law enforcement intern reflected on how much better it was to physically interact with prisoners than to simply discuss them in the classroom; "being around them for a full summer has really opened my eyes as to the people I will be dealing with in the law enforcement field."

A female corrections intern suggested the opposite. There was little in terms of physical involvement available for her at her internship site. Rather than having hand on in or even shadowing, her days were often spent "looking for chores to do to fill my time like cleaning bathrooms and organizing closets and toiletries."

The second component in Kolb's experiential learning model is observation and reflection, for which students should have noted their reaction to the experience. The characteristics used to capture this were narrative transport (3.25) and embedded reflection (3.02). This indicates that students found themselves well involved in the internship and were able to indicate this through their monitoring reports. As previously mentioned, the amount of narrative transport and reflection may be in part due to the expectations of the professor who was conducting the internship at the time.

A good example of a high level of embedded reflection came from a male law enforcement intern. This student reflected upon his goal to do a good job as a dispatcher while being challenged by some of the callers.

> I have recently found myself being challenged to stay calm with callers that are rude, disrespectful, or just plain uncooperative. However, I talked with some of the more seasoned dispatchers and realized that some of the tactics officers use on the street also work on the phone… When a caller gets really upset, I lower my voice, use a softer tone, and ask questions slightly differently. I hear people doing the exact opposite all day long and I think that calls go more smoothly and everything works better if you keep your head on your shoulders and don't get upset.

Another male law enforcement intern suggested that what he had learned in the classroom related well to the field in which he was interning. The student remembered being taught about professionalism in the classroom, which was the best line of defense. During this internship, the student suggested that this is something that he noticed to be true.

Scores for narrative transport and embedded reflection were highest for those with internships in corrections, with an average of 3.5 and 3.3, respectively. A female corrections intern had a similar reflection to that of the law enforcement intern working dispatch. She mentioned observing an argument between a parole officer and an agitated offender in which the officer kept a calm demeanor throughout the interaction. Afterwards she had inquired about the

approach used, learning that the calm prevented exploitation of emotions by clients at a later time. This, according to the intern, was something she planned to utilize.

A female corrections intern reflected negatively upon the work environment within her supervising agency. While the student was excited in her first couple of weeks working, she suggested by week three that there were individuals within the agency who were not as pleasant to be around as they had appeared at first. The intern wrote that: "it almost feels like being in high school again, with all the cliques that never let in any outsider." It should be noted that this agency had a reputation for being less than welcoming to past interns as well. Though the student did not feel welcome in the agency, the over score on ELVIS was 23, suggesting it might not have much bearing.

Kolb's model requires a level of abstract conceptualization in which the interns should indicate they have an ownership in their understanding of the experience. In ELVIS, this experiential learning component is captured by intellectual and social and emotional involvement. Intellectual involvement measures the spectrum of how involved the student is in making decisions about their experience. In the current research, the students have equal proactive and reactive experiences (mean = 3.05). This indicates that students are able to contribute to their own learning, but are mostly guided through the experience.

Interns in law enforcement agencies were likely to have a more guided experience. Many reported completing mostly ride-alongs or shadowing officers in their daily duties. Monitoring reports submitted by these interns often read as a how-to guide. This makes intuitive sense, as law enforcement agencies are meant to respond to the needs of the community; officers within a department do not have say in their day to day learning, nor should it be expected that student interns would.

The average score for social and emotional involvement is slightly more than 3 (3.33), which indicates that the student is working in both collaborative and isolated settings. The experience is not only a learning mechanism to better understand the criminal justice system, but a way in which they are able to buy into it. A male law enforcement intern stated that he most "enjoyed the … opportunity… to see many different divisions within the Sheriff's Office instead of being in one place the entire time." This was reflected throughout this students' reports; a real investment in the system in which he was interning. This same investment was found in another male law enforcement intern:

> I have been treated very well and feel part of the team. I am given a lot of freedom with the internship as well as responsibility. I have been given opportunities most will never get coming out of college into the real world. I have been given the chance to pull together my formal education and put it to use in the criminal justice field. I has given me confidence that not only I know I made the right decision by coming to Washburn University to receive an education, but that I made the right decision for myself by choosing to study criminal justice.

The final component of Kolb's model is active experimentation. This component suggests that the intern should have an influence over people through their actions or that they should be given the opportunity to apply their knowledge or what they have learned to the experience. ELVIS characteristics use to measure this component include locus of control and perceived risk. Locus of control had the lowest average score, the only characteristic that averaged less than three (2.38). This is not surprising, given the atmosphere of the internships

completed in the criminal justice program. Agencies are modeled in a hierarchical manner, with the majority of orders coming from the top and any discretion used at lower levels being of great consequence.

Often times, the reports of those with a low score on locus of control, also read like a lesson. A female corrections intern with a score of one for locus of control is a prime example. "Detained is the term used for juveniles who have been arrested and taken into custody at the detention center." This quote reads as though the student was driven by their educator rather than learning on one's own. A male law enforcement student with a low locus of control score reported that a majority of the experience was tours and ride-a-longs.

Perceived risk scored nearly a point higher on average (3.27). This indicates that, while they intern may not have been given control over what they learned, they were able to take risks when given a task. This ability to take a risk leads to a greater sense of confidence in their skills and mastery of them. A male law enforcement intern had a very low perceived risk (1), having no real opportunity to take an emotional risk. This was demonstrated well through his comment halfway through the experience that it: "looks like today we will continue to keep working on the power point some more."

Some monitoring reports suggested that interns were given good opportunity to take risks. One female law enforcement intern stated that her supervisor permitted her to jump right into the activities of the day, contributing rather than standing by and observing or shadowing. A female security intern reported something similar. She had a greater than average amount of perceived risk. Her supervisors appear to have encouraged this risk taking, as evident in the following quote from her monitoring report. Also apparent from this entry is that the perceived risk is related to her mastery.

> As I have mentioned in earlier posts, my supervisor previously told me to just find a routine that worked best for me. I tried a couple of different methods throughout the week but found that using the same method that I had been doing with my supervisor seemed to work best. It was slow at the beginning, just being extra careful to not miss any units and making sure to double check my sheet, but once I got the hang of driving throughout the units, checking my sheet, and marking off all units at the same time things started to move along faster.

DISCUSSION

The purpose of the current study was to evaluate the experiential learning of criminal justice interns at a Midwestern University. Three interrelated questions related to Kolb's ELT stages were used in the current evaluation. The first of these questions was in which of Kolb's stages do criminal justice interns typically function. The second inquired into whether the interns generated relevant insight from their experience. A final question sought to determine whether criminal justice interns were able to create and participate in new experiences. ELVIS, a scale used to measure experiential learning, was used in this study to measure the experiences of the interns.

Most interns in the current study had very high scores on the ELVIS characteristic measuring physical involvement. Physical involvement in this study represents Kolb's first stage of learning, in which a concrete experience leads individuals to have a new or re- interpretation of a previous experience through doing. It may be that the level of active involvement needed to

participate in many criminal justice settings allows interns to experience a stronger level of experiential learning in Kolb's concrete stage. This may not be surprising, as criminal justice roles and responsibilities involve greater levels of alertness and activeness, by nature of the setting and the tasks, than some other professions. Future research may help determine if the ELVIS characteristic of physical involvement shows similar results in other professional fields where opportunities for multisensory, active learning are present during an internship.

The study then addresses whether interns create meaningful, relevant insights from their internship experiences. Two ELVIS characteristics, narrative transport and embedded reflection, were used to represented Kolb's second stage of reflective observation, during which individuals think about a new experience and try to bridge gaps between what they experienced and what they understand about that experience. Embedded reflection permits individuals to find meaning and relevance in the narrative transport they experience. The ability to capture that reflection is crucial for understanding experiential learning during internships.

The interns in this study appeared to gather relevant insight from their internship. Results demonstrated that narrative transport was strongly connected to all other ELVIS characteristics, which indicates that most had relevant reflection on their experiences. The results also suggest that the degree of reflection may depend on both internal factors (the traits of the individual intern) as well as external factors (the requirements of the internship faculty advisor or how well the internship agency provides time for interns to think about and integrate their experiences). Future research may be needed to determine the extent to which these factors impact an intern's narrative transport and reflection.

Kolb's third stage of abstract conceptualization, where reflecting on a new experience leads to a new or modified idea, was represented in this study via ELVIS characteristics intellectual and social/emotional involvement. The interns in the current study were able to actively participate in their own learning through intellectual involvement, more so when they had the assistance of internship supervisors and mentors. Socially and emotionally, the intern experienced a balance between working with others and working independently. While the interns in this study may have functioned in this third Kolb stage of experiential learning, further research that studies the process of moving from reflective observation (Kolb's second stage) to abstract conceptualization (Kolb's third stage) can help identify how, when, where, and why interns are able to transition from a reflective mode to one that reaches a deeper level of (abstract) thinking. Similarly, future research can assess how much guidance interns need to move from reflection to abstraction and what factors contribute to an intern's self-directed learning.

The final inquiry in the study addressed was whether criminal justice internship agencies allow students to create and participate in new experiences. The ELVIS characteristics of locus of control and perceived risk were used to capture Kolb's fourth and final stage of active experimentation. Based on the results of this study, the interns did not appear to have as many measurable opportunities that illustrated applying new concepts to situations during their internship, although the interns were able to experience some level of physical, emotional, and intellectual risk-taking while completing internship activities. There may be several plausible reasons for these findings.

As noted previously, interns may be more limited in their ability to apply previous learning in criminal justice organizations. Due to the nature of the agency's paramilitary structure, as well as legal liability practices, a higher level of oversight is plausible, thereby confining the extent to which interns can actively apply knowledge to new situations. Moreover,

the capability of the student intern to reflect, conceptualize, and integrate prior learning differs for each student based on their intellect and willingness to take the necessary risks that help allow for actively applying knowledge in new situations. Further, the internship coordinator may impact the extent to which interns effectively thrive in Kolb's fourth stage of active experimentation. Higher education internship programs with coordinators who regularly communicate with their field interns are able to encourage learner-centered experimentation and impact both risk-taking and locus of control characteristic factors for the interns.

Future research should investigate the nexus between classroom learning and field-based experiential learning. While interns may function more regularly within Kolb's first two stages of concrete experience and reflective observation, additional research could explore the specific factors that push or pull the learning process into the subsequent two stages of abstract conceptualization and active experimentation. Instruments like ELVIS can benefit post-secondary institutions by providing a means by which educators can capture areas of the experiential learning process while it occurs during internships. Armed with better information, colleges and universities can foster a stronger, richer connection between knowledge domains and the learning process, and between theory and practice.

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APPENDIX

Figure 1. Seven characteristics rated from 1 (shallow) to 5 (deep).

1. Locus of control (teacher vs student).
   To what extent is the experience educator-driven vs. learner-driven?

2. Physical involvement (Engagement of all six sense modalities).
   Is the experience multisensory and active?

3. Intellectual involvement (Sage on the stage or Guide on the Side)
   How much do you need to contribute intellectually to your own learning? The more the better.

4. Social/Emotional Involvement (Communication, collaboration)
   To what extent does the experience involve others and does it provoke emotional involvement to "go through the head as well as the heart?"

5. Narrative transport (Is the story good?)
   Does the experience involve you in a great story?

6. Perceived risk (Including physical, intellectual, and emotional risk)
   Can learners take risks and possibly fail? We often program that out of education, but it's essential for fostering feelings of mastery, confidence, and efficacy.

7. Embedded reflection (Does the story include the student)
   Do experiences provide time and support for people to reflect and share? This should be embedded all throughout learning, not just at the end.

The Experiential Learning Variables and Indicators Scale (ELVIS) was applied in this study with permission from Brad McLain, PhD, Director of XSci: Experiential Science Education Research Collaborative, University of Colorado, Boulder, CO.
