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**Daniel P. Auld**  
**Fran C. Blumberg**  
**Karen Clayton**

Graduate School of Education, Fordham University

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# Linkages between motivation, self-efficacy, self-regulated learning and preferences for traditional learning environments or those with an online component

Daniel P. Auld, Fran C. Blumberg, and Karen Clayton

## Abstract

*This study assessed 96 law school students' preferences for online, hybrid, or traditional learning environments, and their reasons for these preferences, learning strategies, and motivational orientations. A discriminant analysis revealed that non-traditional learning environment familiarity, self-efficacy, and employment status were the strongest predictors of preferences for non-traditional learning environments. Preferences for traditional environments were attributed to students' familiarity and ability to engage in and foster personal interaction. Preferences for hybrid and online environments were attributed to opportunities for enhanced learning given the convenience and flexible manner in which students with time and familial constraints could access these environments.*

## Keywords:

*Achievement motivation, employment, learning environment preferences, learning strategies, online learning, professional students, self-efficacy.*

## Introduction

Recent trends illustrate the diverse range of institutions of higher education that are incorporating online learning as part of their curricular options (Keller & Parry, 2010). This wide-scale adoption of online learning is exacerbated by the current fiscal climate in which even elite universities are experiencing drastic cuts coupled with students' limited temporal and fiscal resources (Keller & Parry, 2010). Graduate level professional schools (such as those focusing on law and education) have been particularly hard hit as many graduate students need to negotiate work and family obligations while completing their coursework (Williams, June 2010). Despite the recent push toward online learning within professional schools (see Murphy, Levant, Hall, & Glueckauf, 2007; Shuster, Demerth Learn, & Duncan, 2003), relatively little empirical information is available to support their students' preference for an online learning environment, ability to effectively navigate and engage in that environment, and motivation to excel in it (Allen et al., 2004). This study was designed to address this gap, with specific focus on students enrolled in an urban law school.

In general, online learning entails the delivery of instruction whereby the professor and the students are in different physical locations (Allen et al., 2004) as facilitated via digital technology (e.g., video-conferencing, course management systems such as *Blackboard* and *Moodle*). The use of this technology allows for the delivery of course content via synchronous or asynchronous formats. Here, synchronous learning refers to exchanges

between professor and student in real time either in the same physical location or online through a chat board; asynchronous learning refers to exchanges occurring at different times for different class members as allowed via discussion boards. A variant of online learning, posed by hybrid courses, includes synchronous or asynchronous technologies, and traditional face-to-face interactions in a physical classroom.

Reasons for students' enrolment in graduate distance learning courses vary and often emphasize the nature of student-student and student-teacher interaction possible via digital technology. For example, in Müller's (2008) qualitative study of undergraduate and graduate women within an online degree program, attributions for successful completion of their degree emphasized the sense of community fostered within the online environment. Attributions for the inability to complete one's degree emphasized feelings of disconnection from course faculty. Northrup (2002) also investigated factors graduate students viewed as notable in the context of an online instructional technology master's course. Students noted both frustration with the extensive work involved, and numerous advantages to the online learning experience. Specifically, they favored synchronous activities when they attained prompt faculty responses to their inquiries, and preferred asynchronous activities for their convenience and flexibility offered. Further, Bassili (2006) found that the ability to watch lectures online as opposed to attending class provided students with convenience not afforded in traditional classroom venues.

The flexibility of online learning also may accommodate differential learning preferences (Katz, 2002; Northrup, 2002). For example, Katz (2002) found that students in a synchronous video-conferencing group showed greater satisfaction with and control of their learning and motivation to study than students in an internet-distributed course. By comparison, the latter group reported greater autonomy in their learning given their ability to regulate where and when they engaged in coursework. Thus, research shows that students' satisfaction with distance learning includes their ability to control how and when they learn (Bassili, 2006; Katz, 2002), their access to the instructor (Northrup, 2002), and their motivation to master their online courses (Katz, 2002), a finding of particular salience to the present study.

Specifically, the motivation to master a given course, more broadly referred to as achievement motivation, has been linked to students' academic success. Key constructs examined within the context of achievement motivation include goal orientation (Ames, 1992; Dweck & Legget, 1988) and self-regulated learning (Pintrich, 2003; Zimmerman & Martinez-Pons, 1988). The goals that have been most often investigated are those of mastery, performance-approach, and performance-avoidance goals (Ames, 1992; Dweck & Leggett, 1988; Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Midgley, Kaplan, & Middleton, 2001; Pintrich, 2003). Mastery goals are those that learners adopt to maximize their understanding of material (Ames, 1992). Performance goals reflect individuals' concerns with how well they perform in a given task (Ames, 1992). Performance goals are further bifurcated into performance-approach and performance-avoidance goals (Midgley et al., 2001). Individuals holding performance-approach goals seek tasks that they believe will result in outperforming peers. Individuals holding performance-avoidance goals refrain from activities in which they may display poor ability and appear "stupid" in the eyes of others.

A related construct to goal orientation is that of self-regulated learning, which refers to learning guided by metacognition, motivation, and behavior (Zimmerman & Martinez-

Pons, 1988). Research indicates that students self-regulate their learning to differing degrees. Those who are considered highly self-regulated are knowledgeable about their abilities and how to attain their goals (Zimmerman & Martinez-Pons, 1988). These learners often show a mastery goal orientation (Zimmerman & Martinez-Pons, 1988) and are also likely to demonstrate high levels of self-efficacy (Pintrich, 2003), defined as one's cognitive judgments of one's abilities to successfully complete a given task (Schunk & Pajares, 2002). Those considered weak self-regulators often demonstrate maladaptive learning patterns and are less likely than high self-regulators to sustain effort to attain their learning objectives (Zimmerman, 1989). As found among those who adopt performance goals, weak self-regulated learners often select tasks that require little effort to succeed and pose little to no challenge.

Surprisingly, research concerning these motivational constructs in the context of online learning is noticeably sparse. This study was designed to address this gap and was based on work by Clayton, Blumberg and Auld (2010). Specifically, these authors examined graduate and undergraduate students' motivational approaches to learning, their strategies for learning, and their preferences for non-traditional or for traditional learning environments. Traditional in this context refers to instruction delivered via a classroom setting with students physically present. Non-traditional environments include courses delivered partially (e.g. hybrid) or wholly online. Clayton et al. (2010) found that students who preferred traditional learning environments demonstrated a mastery-oriented approach to learning and applied more effort while learning than those preferring non-traditional environments. By comparison, students who preferred non-traditional environments reported greater self-efficacy in their ability to manage and complete online and hybrid courses.

The present study was designed to corroborate these findings among law school students. Of particular interest was whether these students' would differentially evaluate traditional versus more non-traditional (online or hybrid) learning settings based on their motivational orientation, learning strategies, sense of self-efficacy, and their familiarity with non-traditional learning environments. An additional concern was how their employment status (full-time versus part-time or unemployed) would impact their evaluations. Students demonstrating high levels of mastery approach, self-regulated learning, and self-efficacy were expected to select hybrid learning environments because they ostensibly offered greater flexibility and convenience to facilitate their learning (Bassili, 2006; Northrup, 2002). Students demonstrating a performance-avoidance orientation, low self-regulated learning, and low self-efficacy were expected to opt for traditional courses given their fear of new environments in which they might appear 'stupid' and fail to meet course objectives (Pintrich, 2003). Further, employed students and students familiar with non-traditional learning environments were expected to prefer both hybrid and online courses over traditional courses given time constraints and desire for flexibility (Müller, 2008; Northrup, 2002).

## Method

### *Participants*

The sample was drawn from an urban law school, which consisted of approximately 1,500 part- and full-time attendees. Of the 109 participants who began the study, 96 provided full data as reported here. This sample was comprised of 41.3% males. First year law students comprised nearly one third of the participants (32.4%) as did second year students. Third year students were slightly less represented (29.6%) and fourth year law students were the least represented (5.6%). These figures mirror the school's composition at large.

More full-time students (78.5%) participated than did part-time students (21.5%) consistent with the school's enrolment. Race and ethnicity distributions were consistent with the school in general as White/Caucasian students represented the greatest proportion of the sample (79%), followed by Hispanics (11%), Asian Americans/Asians (6%), African Americans/Blacks (2%), and Caribbean or Caribbean-American (2%). Most students in the sample were unemployed (67.9%), followed by 15.6% who reported working 1 – 20 hours per week, and 16.5% who reported working 21 hours or more per week. Unemployed students tended to be enrolled full-time, whereas employed students tended to be enrolled part-time.

### *Instruments*

Participants completed a survey package that included six demographic items concerning participants' sex, age, year in law school, enrolment status (part- or full-time), ethnicity, and employment status. The package also included items from the Motivated Strategies for Learning Questionnaire (MSLQ; see Pintrich et al., 1991) and the Patterns of Adaptive Learning Survey (PALS; See Midgley et al., 2000). The 70 items from these two measures were self-report, four-point Likert-scale instruments that assessed students' motivational orientation, self-efficacy, and learning strategies. Both instruments have been found to predict students' course performance at the college level and beyond.

Reliability statistics were calculated and found to be acceptable as determined by Cronbach's  $\alpha$  coefficient for each motivation sub-scale (see Table 1). For this study, the measures were slightly modified to apply to a law school setting. From the MSLQ responses the self-regulation, self-efficacy, rehearsal (referred to here as a learning strategy), critical thinking, time and study management, effort regulation, elaboration (referred to here as a learning strategy), and organization (referred to here as a learning strategy) scales were generated. From the PALS responses, mastery-approach, performance-approach, and performance-avoidance scales were generated. Scales were created by calculating the mean of all questions related to each scale.

Also included in the survey package was the Choice of Learning Environment Survey (CLES). This brief questionnaire, designed and used by Clayton et al. (2010) (see Appendix A) solicits students' preferences for, prior experience with, knowledge of, and reasons for selecting a traditional, hybrid or online learning environment. By asking students to justify why they would select a particular environment without other details other than if it is traditional, or with an online component, students in their own words

without educational or technical lingo could elucidate their feelings about each environment.

To be included in the main analysis, responses to online experience and familiarity with online learning questions were coded to form a non-traditional learning environment familiarity scale that ranged from 0 – 6 where 0 represented no familiarity and 6 represented most familiar with online environments. The employment variable consisted of one multiple-choice question in which participants could indicate the number of hours worked per week (response options included: 0 hours, 1-20 hours, and 21+ hours) (see Table 1).

**Table 1:** Means, standard deviations and reliability coefficients for employment, MSLQ, PALS and non-traditional learning familiarity scales

Predictor Variable	Traditional (n = 67) M(SD)	Non-Traditional (n = 29) M(SD)	Alphas
Self Regulation <sup>M</sup>	2.77 (.44)	2.68 (.52)	.77
Self-Efficacy <sup>M</sup>	2.62 (.87)	3.01 (.68)	.96
Mastery Approach <sup>P</sup>	3.43 (.53)	3.20 (.67)	.82
Perform Approach <sup>P</sup>	2.66 (.70)	2.58 (.58)	.78
Perform Avoidance <sup>P</sup>	2.80 (.57)	2.83 (.60)	.74
Rehearsal <sup>M</sup>	2.24 (.67)	2.11 (.66)	.76
Critical Thinking <sup>M</sup>	2.81 (.71)	2.61 (.63)	.86
Time/Study Manage <sup>M</sup>	3.10 (.61)	2.86 (.64)	.84
Effort Regulation <sup>P/M</sup>	3.14 (.64)	2.93 (.62)	.71
Elaboration <sup>M</sup>	2.99 (.58)	2.92 (.42)	.77
Organization <sup>M</sup>	2.81 (.64)	2.57 (.85)	.66
Non-traditional Familiarity	1.21 (1.55)	2.14 (1.81)	.74
Employment	.42 (.72)	.86 (.88)	

Note: \*Range is from 1 – 4 except for non-traditional familiarity, which is 0-6 and employment, which is 0-2. <sup>M</sup> indicates variable was calculated from the MSLQ. <sup>P</sup> indicates variable was calculated from the PALS.

### *Procedure*

All full-time and part-time students were contacted in an e-mail message with a hyperlink allowing participants access to the study instruments. This hyperlink brought students to a web page, the first part of which was the consent form. Participants who accepted the conditions of the study were then presented with the entire survey packet administered in a standard order (demographic questionnaire, followed by the MSLQ and PALS items, and finally, the CLES). Administrations ranged between 25-30 minutes.

The hyperlink actively collected data for 30 days. One reminder e-mail was sent to students after 16 days reminding them that their participation was appreciated and would inform future curriculum decisions. Two weeks later, the survey link was closed.

Participants' reasons for choosing specific learning environments were coded (see coding below) and frequencies for each answer were calculated and added to the quantitative analyses performed.

### *Coding of responses to preferences for learning environment items*

Qualitative answers clarifying learning environment choice (see Appendix A; questions 6 and 7i, ii, iii) were coded using the participants' own words. This inductive technique has been widely used in studies of learning and motivation (e.g., Blumberg, Rosenthal, & Randall, 2008; Clayton et al., 2010 and Zimmerman & Martinez-Pons, 1986). For the four open-ended items, participants were to specify and justify their preferred learning environment choice and to indicate, regardless of preference, why they might take an online course, a hybrid course, and a traditional course. Participants' responses were then categorized into one of six mutually exclusive themes as adapted from those used by Clayton et al. (2010). Review of these categories and sample comments are shown in Table 2.

**Table 2:** Characterization of qualitative response categories and sample responses

Category	Brief Description	Example
1. Engaged Learning	Environment is seen as interactive and able to maintain learners' attention.	"Better Q&A environment; traditional classroom setting helps to pay attention; more conducive to learning; have peers around; better overall experience."
2. Personal Learning Style	Instructional pedagogy accommodates participants' learning preferences and strategies	"I enjoy sitting in a class and listening to a professor lecture. For similar reasons to preferring small class size to large, I would prefer a traditional environment to an online environment. I think I would remain far more focused on class and the materials at hand in a traditional environment." "I am unfamiliar with the benefits of an online course."
3. Familiarity	Pertains to learner's experience and comfortability with the environment (or lack of familiarity with an alternative.)	
4. Augmented Learning	Environment offers innovation and/or allows for acquiring new skills.	"My use of computer based study materials has enhanced and made efficient my study for law school exams."
5. Lifestyle Fit	Environment allow for educational and work-life balance.	"As a part-time student with a full-time job and family, it is extremely important for me to have flexibility in my schedule. Online courses offer that flexibility. During a portion of my undergraduate studies, I took online courses. I found them to be superior to in-class courses when the instructor posted video lectures and lead discussion boards."
6. Course Requirement	Course is mandated and foundational to plan of study .	"If I thought of the material as very black letter and I was working and wanted to be able to take the course around the hours that I had to work."

All open-ended responses were coded by the author and an independent rater. Inter-rater reliability averaged 81% across all justifications. Discrepancies were resolved through discussion.

## Results

*Which Environment Did Participants Prefer.* Traditional courses were the most popular choice of learning environment (70.1%), followed by hybrid (21.6%), and online (8.2%). Of all participants, only 19.8% previously had taken an online course; 28.9% had taken a hybrid course, and more than half reported that they were completely unfamiliar with what would be entailed with either an online (51%) or hybrid course (56%). Given that so few students selected an online course as their preference, the hybrid and online responses were combined into a new category referred to as the non-traditional learning environment, which was subsequently used in further analyses.

*Motivational and learning orientations.* The means, standard deviations, and alphas for the 11 independent motivation and learning strategy variables (self-regulated learning

strategies, self-efficacy, mastery-approach, performance-approach, performance-avoidance, rehearsal, critical thinking, time and study management, effort regulation, elaboration, and organization scales), and the distance learning familiarity and employment variables are shown in Table 1. Students who preferred traditional environments scored highest on mastery-approach ( $M_{\text{Traditional}} = 3.43$ ;  $SD = .53$  v.  $M_{\text{Non-traditional}} = 3.20$ ;  $SD = .67$ ), effort regulation ( $M_{\text{Traditional}} = 3.14$ ;  $SD = .64$  v.  $M_{\text{Non-traditional}} = 2.93$ ;  $SD = .62$ ), and time and study management ( $M_{\text{Traditional}} = 3.10$   $SD = .61$  v.  $M_{\text{Non-traditional}} = 2.86$ ;  $SD = .64$ ). Students who preferred non-traditional environments scored higher than those who preferred traditional environments on self-efficacy ( $M_{\text{Non-traditional}} = 3.01$ ;  $SD = .68$  v.  $M_{\text{Traditional}} = 2.62$ ;  $SD = .87$ ) familiarity with non-traditional environments ( $M = M_{\text{Non-traditional}} = 2.18$ ;  $SD = .86$  v.  $M_{\text{Traditional}} = 1.62$ ;  $SD = .90$ ), and employment ( $M = M_{\text{Non-traditional}} = .86$ ;  $SD = .88$  v.  $M_{\text{Traditional}} = .42$ ;  $SD = .72$ ). All scales but that pertaining to organization resulted in a Cronbach alpha coefficient of .70 or higher, consistent with the instrument authors' criteria for reliability of the measures' variables (see Midgley et al. 2000; Pintrich, Smith, Garcia, & McKeachie, 1991). Clearly, many of the motivational constructs were correlated with one another demonstrating that these students were highly-motivated with good studying habits. However, more significant correlations and consistency were found among participants who preferred traditional learning environments as compared to those preferring non-traditional environments (see Table 3).

**Table 3:** MSLQ and PALS scales intercorrelations by learning environment choice

Scales	1	2	3	4	5	6	7	8	9	10	11
Traditional											
1. SRL	--	.18	.58**	.53**	.27*	.46**	.57**	.58**	.39**	.68**	.57**
2. SEF		--	.35**	.12	.00	-.04	.21	.18	.23	.20	.02
3.			--	.41**	.36**	.38**	.41**	.63**	.46**	.54**	.38**
MAP											
4. PAP				--	.52**	.29*	.30*	.38**	.24*	.32**	.37**
5. PAV					--	.39**	.03	.38**	.19	.09	.16
6. REH						--	.26*	.41**	.17	.29*	.34**
7. CTH							--	.29*	.14	.78**	.23
8. TSM								--	.72**	.43**	.53**
9. EFF									--	.21	.44**
10. ELAB										--	.43**
11.											--
ORG											

\*\* $p < .01$ ; \* $p < .05$ .

Note: SRL= Self-regulated learning; SEF= Self-efficacy; MAP =Mastery approach; PAP=Performance approach; PAV = Performance Avoidance; REH = Rehearsal; CTH= Critical thinking; TSM = Time and study management; EFF = Effort Regulation; ELAB = Elaboration; ORG = Organization.

**Table 3** *Cont.*

Non-Traditional

1. SRL	--	-									
	.11	.64**	.25	.15	.39*	.50**	.71**	.56**	.63**	.76**	
2. SEF	--	.03	.11	.07	-.06	.17	.07	.07	-.05	-.01	
3.		--									
MAP			.06	.44*	.36	.22	.75**	.75**	.52**	.49**	
4. PAP			--	.53**	.11	-.40*	.14	.17	-.02	.09	
5. PAV				--	.11	-.33	.42*	.33	.37*	.37*	
6. REH					--	.19	.28	.26	.24	.54**	
7. CTH						--	.14	.12	.40*	.11	
8. TSM							--	.77**	.64**	.66**	
9. EFF								--	.43*	.55**	
10. ELAB									--	.56**	
11.										--	
ORG											

\*\* $p < .01$ ; \* $p < .05$ .

Note: SRL= Self-regulated learning; SEF= Self-efficacy; MAP =Mastery approach; PAP=Performance approach; PAV = Performance Avoidance; REH = Rehearsal; CTH= Critical thinking; TSM = Time and study management; EFF = Effort Regulation; ELAB = Elaboration; ORG = Organization.

**Table 4:** Discriminant analysis statistics for predicting learning environment preference ( $N = 96$ )

Predictor Variable	Correlation Coefficients	Standardized Coefficients	Wilk's $\lambda$	F(1,94)
Self Regulation	.16	-.55	0.99	0.87
Self-Efficacy	-.37	-.56	0.95	4.69*
Mastery Approach	.32	.73	0.96	3.53
Perform Approach	.10	.04	1.00	0.32
Perform Avoidance	-.04	-.22	1.00	0.05
Rehearsal	.14	-.20	0.99	0.72
Critical Thinking	.23	.65	0.98	1.84
Time/Study Manage	.29	.18	0.97	2.91
Effort Regulation	.25	-.09	0.98	2.15
Elaboration	.10	-.31	1.00	0.37
Organization	.26	.33	0.98	2.38
E-Learning Familiarity	-.43	-.48	0.93	6.55*
Employment	-.44	-.50	0.93	6.73*

\*  $p < .05$ 

Note: Positive correlation coefficients indicate traditional environment group membership while negative correlation coefficients indicate non-traditional environment group membership.

*Variables that predicted Learning Environment Choice.* A discriminant analysis was run to determine which of the study variables—motivational and learning strategy variables, familiarity with non-traditional environments, and employment—would predict a participant's membership as part of the group who preferred traditional environments versus those who preferred non-traditional environments independent of participants' actual choice (see Table 4). Homogeneity of variance/covariance was not found given the overwhelming number of students who presented as mastery-oriented, chose traditional learning environments, and were unemployed. Accordingly, the generalizability of the findings outside the study is compromised.

All study variables were entered into the discriminant analysis simultaneously and one function was generated. The overall Wilk's lambda was significant  $\lambda = .73$ ,  $X^2(13, N = 96) = 27.51$ ,  $p < .05$ . Thus, the function generated by these predictor variables

significantly differentiated between students' choices of traditional or non-traditional environments. The squared canonical correlation coefficient (.27) indicated that 27% of the variance between the two environment preferences was explained by this proposed statistical model (i.e., the predictor variables). Classification results (see Table 5) revealed that 78.1% of the cases were correctly classified. Cross-validation derived 68.8% accuracy overall. The means of the discriminant functions supported these results. Specifically, traditional environments had a function mean of .40; non-traditional environments yielded a mean of -.91. Discriminant analysis statistics, particularly standardized function coefficients and correlation coefficients, revealed that the variables of familiarity, employment, and self-efficacy were most associated with the function. Closer inspection indicated that those who selected traditional learning environments were unemployed, reported less self-efficacy with non-traditional course requirements, and were less familiar with non-traditional environments than those who chose them. Students who chose non-traditional environments reported as partially to full-time employed, more self-efficacious in their ability to successfully complete an online course, and familiar with non-traditional environments.

**Table 5:** Classification analysis for choice of learning environments

Actual Group Membership	n	n	Predicted Group Membership		
			Traditional %	Non-Traditional N	Non-Traditional %
<u>Original</u>					
Traditional	67	62	92.5	5	7.5
Non-Traditional	29	16	55.2	13	44.8
<u>Cross-Validated</u>					
Traditional	67	57	85.1	10	13.4
Non-Traditional	29	20	69.0	9	31.0

Note: Overall percentage of original grouped cases correctly classified = 78.1%

Overall percentage of cross-validated grouped cases correctly classified = 68.8%

*Reasons for Choosing Specific Learning Environments.* The most frequent reason that participants chose a particular environment was its match with their personal learning style (39%). Of those who selected the traditional learning environment, oft-cited reasons also included engaged learning (28%) and familiarity (24%). Of those who selected the hybrid environment, almost half (48%) did so because they believed that it augmented their learning. Of those who selected online environments, half reported that it matched their personal learning style; the remainder reported that it fit with their lifestyle given work and other commitments (see Table 6).

**Table 6:** Representation of categories by choice of environment.

<b>Q 6. Why chose this environment? (N = 83)</b>	Selected Learning Environment							
	<b>Traditional</b>		<b>Hybrid</b>		<b>Online</b>		<b>Total</b>	
<b>Category</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Engaged Learning	15	18	2	2	--	--	17	20
Personal Learning Style	24	29	4	5	4	5	32	39
Familiarity	13	16	1	1	--	--	14	17
Augmented Learning	1	1	10	12	--	--	11	13
Lifestyle Fit	1	1	4	5	4	5	9	11
Course Requirement	--	--	--	--	--	--	--	--
<b>Total</b>	<b>54</b>	<b>65</b>	<b>21</b>	<b>25</b>	<b>8</b>	<b>10</b>	<b>83</b>	<b>100</b>

  

<b>Q 7i. Why might take an online course? (N = 77)</b>	Selected Learning Environment							
	<b>Traditional</b>		<b>Hybrid</b>		<b>Online</b>		<b>Total</b>	
<b>Category</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Engaged Learning	--	--	--	--	--	--	--	--
Personal Learning Style	--	--	--	--	--	--	--	--
Familiarity	--	--	--	--	--	--	--	--
Augmented Learning	1	1	3	4	--	--	4	5
Lifestyle Fit	29	38	14	18	6	8	49	64
Course Requirement	19	25	4	5	1	1	24	31
<b>Total</b>	<b>49</b>	<b>64</b>	<b>21</b>	<b>27</b>	<b>7</b>	<b>9</b>	<b>77</b>	<b>100</b>

  

<b>Q 7ii. A hybrid course? (N = 76)</b>	Selected Learning Environment							
	<b>Traditional</b>		<b>Hybrid</b>		<b>Online</b>		<b>Total</b>	
<b>Category</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>n</b>	<b>%</b>
Engaged Learning	--	--	--	--	--	--	--	--
Personal Learning Style	--	--	--	--	--	--	--	--
Familiarity	7	9	--	--	--	--	7	9
Augmented Learning	16	21	9	12	4	5	29	38
Lifestyle Fit	14	18	8	11	3	4	25	33
Course Requirement	11	14	3	4	1	1	15	20
<b>Total</b>	<b>48</b>	<b>63</b>	<b>20</b>	<b>26</b>	<b>8</b>	<b>11</b>	<b>76</b>	<b>100</b>

  

<b>Q 7iii. A traditional course? (N = 72)</b>	Selected Learning Environment							
	<b>Traditional</b>		<b>Hybrid</b>		<b>Online</b>		<b>Total</b>	
<b>Category</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>n</b>	<b>%</b>
Engaged Learning	14	19	11	15	2	3	27	38
Personal Learning Style	19	26	4	6	2	3	25	35
Familiarity	10	14	4	6	3	4	17	24
Augmented Learning	1	1	1	1	--	--	2	3
Lifestyle Fit	--	--	--	--	1	1	1	1
Course Requirement	--	--	--	--	--	--	--	--
<b>Total</b>	<b>44</b>	<b>61</b>	<b>20</b>	<b>28</b>	<b>8</b>	<b>11</b>	<b>72</b>	<b>100</b>

Regardless of learning environment choice, two-thirds of respondents specified lifestyle fit as why they would select an online course; the remaining third justified their choice by claiming that it would help meet a course requirement. Across all learning environments, participants reported that they would select hybrid courses to augment learning (38%) and to fit their lifestyle (33%) and traditional courses to foster engaged learning (38%), to match their personal learning style (35%), and for their familiarity with this environment (24%).

## Discussion

This study examined how motivational approaches to learning, learning strategies, employment, and distance learning knowledge and familiarity related to students' choice of learning environment. Consistent with findings by Clayton et al. (2010), students overwhelmingly preferred traditional over non-traditional environments and justified their preference for the environment's ability to foster their learning objectives. Specifically, about half the students who preferred the traditional environment attributed their preference to its mesh with their personal learning styles and its ability to engage them in the learning process. Those preferring non-traditional environments felt more comfortable engaging in and more familiar with online or hybrid course work, and were more likely to be employed part- or full-time.

The study also showed, consistent with Clayton et al. (2010), that those who preferred courses with online components believed in their ability to successfully complete online coursework. Further, those who selected hybrid courses cited the benefits of using technology to supplement lectures; those who chose online courses did so to accommodate their educational workload with non-academic responsibilities. Thus, for the latter group, personal reasons rather than academic learning objectives dominated their environment preference. This is further substantiated by employed law school students justifications for non-traditional learning environment preference due to its flexibility; presumably, to balance fiscal and familial constraints. Our participants' justifications citing flexibility conform to those reported by other researchers (see Müller, 2008; Northrup, 2002).

A finding of interest was how control of one's learning was reflected in the justifications of those who preferred traditional and hybrid environments. For example, the former group reported the mesh with traditional learning environments as how they liked to learn and believed they would be successful. Those citing preferences for hybrid courses referred to the control offered via the ability to review materials presented online when they desired and the freedom to meet with their professor onsite if necessary. Our findings conform with those of other studies that have shown that one's perceived control over how and when one learns is viewed as a benefit of online learning (Bassili, 2006; Katz, 2002). Notably, about 20% of current study's participants reported that they would take an online course if confronted with limited onsite course offerings. Thus, our law school sample did not seem to regard online courses as providing ideal circumstances for their professional training, a sentiment echoed in the Clayton et al. (2010) study of graduate students in education.

Surprisingly, achievement goal orientation did not affect choice of environment. This situation may reflect the lack of variability in goal orientation across the sample. Specifically, the majority of students responded to relevant survey items consistent with a mastery goal orientation. Equally unexpected was the relative lack of confidence

among mastery-oriented students who chose traditional learning environments in their ability to successfully manage online courses as opposed to their mastery-oriented counterparts who chose non-traditional environments. This distinction among students who preferred traditional environments and held mastery goal orientations, which usually yields preferences for challenging learning environments, reveals that they may shy away from environments if they are presented with online elements. Clearly, further exploration of this issue is warranted.

Similar to Clayton et al. (2010) self-efficacy was also a significant predictor of non-traditional environment choice. This finding was obtained among employed participants who reported familiarity with and confidence in their abilities to navigate non-traditional environments. These results highlight that students who believe in themselves and their abilities to manoeuvre online learning will be more willing to engage in this form of learning. In fact, research applying Csikszentmihalyi's (1988; 1990) concept of flow or optimal experience to computer-based learning shows that self-efficacy is associated with learners' reports of flow episodes (Liao, 2006; Shin 2006) and greater motivation to engage in learning activities. One way in which self-efficacy may be enhanced is through repeated exposure to a given activity (Bandura, 1977). This point is underscored by our participants who were more inclined to report the likelihood of taking an online course if they had already taken one.

Overall, this study found that the majority of law school students in our sample preferred traditional learning environments largely for their provision of presumably more direct interaction with fellow students and instructors. Comparatively, they did not perceive online courses as capable of meeting their learning goals. However, as economic conditions in the US and abroad continue to create the need for students to balance work and school, the taking of courses with online components may be a necessity rather than a choice. Accordingly, ways to enhance the attractiveness of non-traditional courses may be warranted. Our findings indicate that enhancing students' sense of efficacy in their ability to navigate and negotiate the demands of online or hybrid courses and low-risk exposure to them, may be one such vehicle.

## Note

<sup>1</sup> The authors edited the items of the MSLQ for use in a law school setting. Pintrich, et al., (1991, p. 3) indicate in their introduction to the manual for the MSLQ that 'the scales are designed to be modular and can be used to fit the needs of the researcher or instructor'. Therefore, it is assumed that these slight modifications to accommodate law school students is acceptable. The PALS likert items were revised from 5-point to 4-point for consistency with the MSLQ. Self-efficacy items were modified to apply to online settings enabling these items to be compared to students' learning environment preferences.

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## Biographical Statement

*Daniel P. Auld* is a PhD student at Fordham University's Graduate School of Education. His research interests concern individuals' engagement and cognitive processing of media, video games and computer technology. He has published in the areas of media literacy and game play. His current research investigates graduate students' motivational approaches to learning and their preferences for traditional or online learning environments.

*Fran C. Blumberg* is an Associate Professor in Division of Psychological and Educational Services in Fordham University's Graduate School of Education. She holds a Ph.D. in developmental psychology from Purdue University. Her research interests concern the development of children's attention and attention strategies in the context of traditional academic and media-based learning situations. She has published and received funding for her research concerning children's attention and learning while playing video games. She also is collaborating with researchers in the UK to investigate cross-cultural influences of media on children and adolescents' behavior. Her most recent book is *When East Meets West: Media Research and Practice in US and China* (Cambridge Scholars Publishing, 2007).

*Karen Clayton* is a PhD student in the Educational Psychology Program in the Division of Psychological and Educational Services at Fordham University. Her research interest concerns the relationship between culture and achievement motivation, especially the development of culturally sensitive theories of motivation. She is also interested in the role of achievement motivation and online learning.

Email: [dauld@law.fordham.edu](mailto:dauld@law.fordham.edu)

## Appendix A.

Participant ID: \_\_\_\_\_ (same as on survey)

### Choice of Learning Environment Survey

Please answer the following questions as honestly and accurately as possible. Before doing so, please read the brief paragraph below defining the different types of learning environments that you may be asked about in the questions below.

- E-learning refers to learning that is facilitated and supported through the use of technology and includes forum such as blended or hybrid learning and online education.
- Online education refers to courses that are delivered entirely via the internet.
- Hybrid or blended learning is a combination of the traditional face-to-face classroom instruction with online learning.

**Please Check only one.**

1. Have you ever taken an online education class.

Yes .....

No.....

2. Have you ever taken a hybrid learning class

Yes .....

No.....

3. How familiar are you with what it entails to take a class online?

Very Familiar .....

Familiar .....

Not at all Familiar .....

4. How familiar are you with what it entails to take a hybrid class?

Very Familiar .....

Familiar .....

Not at all Familiar .....

5. Imagine that you need to take a course that is important for your degree. You have

the option of choosing one of the following learning environments to take the course. Please check the environment you would choose.

Traditional Face-to-face learning environment

Hybrid (combination of traditional and online education)

Online Education

6. Briefly explain your choice above.

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7. Regardless of your answer in question five (5), why might you take an (a):

(i) Online course? Briefly explain.

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(ii) Hybrid course? Briefly explain.

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(iii) Traditional course? Briefly explain.

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**Thank you for your time.**