

DEVELOPMENT OF THE ACADEMIC WRITING MOTIVATION QUESTIONNAIRE

by

ASHLEY RENEE PAYNE

(Under the Direction of Louis Castenell and Shawn Glynn)

ABSTRACT

College students' motivation to write contributes to their success as writers in college courses. To help college composition instructors determine the writing motivation of their students, the Academic Writing Motivation Questionnaire (AWMQ) was developed. The AWMQ is a 37-item Likert-type questionnaire that takes into account various aspects of writing motivation. The AWMQ was administered to 69 undergraduate students enrolled in undergraduate English courses at The University of Georgia. The students' amount of reading, academic major, and gender were examined in relation to the AWMQ. The students who read more were found to have significantly higher scores on the AWMQ than students who read less. Humanities majors had higher scores than majors in other areas. Males and females did not differ significantly in their AWMQ scores. The findings implied that the AWMQ is an efficient and reliable questionnaire, with good content validity, that can assess the writing motivation of students in writing composition courses.

INDEX WORDS: Writing, Motivation, Literacy, College, Assessment

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CHAPTER 1

Introduction

Ernest Hemmingway, author and Nobel laureate, said “There is nothing to writing. All you do is sit down at a typewriter and bleed.” For many college students, writing is a skill that does not come easily. They approach it reluctantly, posing a challenge for themselves and the instructors of writing-intensive classes. Some of these students may even take alternate college tracks in order to avoid writing-intensive courses.

Writing includes many different cognitive steps that a student must undertake in order to be successful. These steps include memory retrieval, goal setting, planning, problem solving, and evaluation (Flower & Hayes, 1981). The number and complexity of these steps assumes a high level of motivation on the part of the student.

Writing is an important skill in all academic disciplines at all school levels. Students’ ability to write clearly and effectively affects their academic performance across the curriculum (Hidi & Boscolo, 2007). Furthermore, most professions require good writing skills while others even higher levels of competency.

Motivation to write is an important factor in writing competence (Pajares, 1996). Students who lack motivation to write will not readily engage in academic writing activities. These students may exhibit high anxiety about writing, low self-efficacy for writing, and a lack of self-regulation and self-determination when writing.

Motivation is a very large and well-studied field. In fact, it is so large that sometimes it is hard to draw connections among motivation and specific activities such as math and science, or even writing (Hidi & Boscolo, 2007). With writing being such an integral part of

human existence, it is very important that studies of motivation and writing be conducted. It is even more important that the outcomes of these studies have real-world applications that can be implemented to increase the quality of all students' writing.

The first question an instructor of a writing-intensive class might ask when initially meeting students is, "To what extent are these students motivated to write?" The second question is, "Why are these students motivated to the extent they are?" The third question is likely, "How can I increase these students' motivation to write?" These questions, and the lack of clear answers to them, often lead to writing instructors becoming frustrated when teaching writing.

Even when experienced instructors realize that a student is not motivated, it is often hard to identify the source of this lack of motivation. If writing instructors were to have a reliable, valid, and efficient questionnaire for gauging their students' motivation to write, they could more effectively implement strategies to motivate students to write. These strategies could then be tailored to individual students based upon the findings of such a questionnaire. With these goals in mind, the Academic Writing Motivation Questionnaire was developed in order to reliably, validly, and efficiently assess undergraduate students' motivation to write in writing-intensive classes.

CHAPTER 2

Review of the Literature

Writing self-efficacy is associated with aspects of motivation such as writing apprehension, intrinsic and extrinsic goals, perceived value of writing, and self-efficacy for self-regulation (Pajares & Johnson, 1996; Pajares & Valiente, 1997; Zimmerman & Bandura, 1994). The Academic Writing Motivation was developed based on these aspects of motivation. These aspects of motivation are reviewed in the following sections.

Apprehension

Writing apprehension leads to avoiding writing tasks, especially when writing is to be graded (Daly & Hailey, 1984). The field of writing self-perception got its start with research done on writing apprehension in the 1970's (Daly & Miller, 1975). Writing apprehension can be loosely defined as the negative feeling of anxiety over writing exercises.

Students who have writing apprehension will most always find a way to avoid the writing task by either not turning in work or being absent on days when writing is going to be required. These students also never voluntarily sign up for a course that requires writing, and they usually choose professions where writing is not a day-to-day activity.

Daly and Miller (1975) developed a 26-item questionnaire to measure writing apprehension that they patterned after existing scales used to assess communication apprehension. The questionnaire included Likert-type items such as, "I am nervous about writing," and "I don't like my writing to be evaluated." The items were subdivided into categories: anxiety about writing, anxiety about teacher evaluation of writing, anxiety

about peer evaluation of writing, anxiety about professional evaluation about writing, anxiety about letter writing, anxiety about environments for writing, anxiety about writing in tests, and anxiety about self-evaluation of writing and its worth. The instrument was administered to undergraduate students enrolled in basic composition and speech communication courses at the West Virginia University in 1974. The instrument was established as a reliable and valid tool for assessing writing apprehension.

Many of the items on Daly and Miller's instrument were taken into consideration when designing items for the questionnaire in the present study. Writing apprehension typically correlates negatively with writing performance. Writing apprehension is often a consequence of lack of confidence in one's capability to write or learn to write—this capability is referred to as writing self-efficacy (Pajares & Valiante, 1997).

Self-Efficacy

According to Bandura's Social Cognitive Theory, self-efficacy is an important predictor for human behavior (Bandura, 1986, 1997). Self-efficacy beliefs are defined as, "personal beliefs about one's capabilities to organize and implement actions necessary for attaining designated levels of performance" (Bandura, 1986, p. 391).

Students' self-efficacy beliefs strongly predict students' academic successes. Students with high self-efficacy beliefs show greater intrinsic interest in tasks, set higher achievement goals, put forth more effort when they encounter difficulties and approach difficult tasks as challenges. These students also experience less anxiety and stress when taking on difficult tasks (Pajares, 1996). Students may not have the same level of self-efficacy across all domains of writing (Pajares, 2003). When developing a measure of self-

efficacy beliefs, the efficacy scale should provide multiple items that vary in level, strength, and generality (Bandura, 1997).

Pajares (2003) discusses ways of measuring writing self-efficacy that have proven popular. One way of measuring student's writing self-efficacy is to assess students' confidence in their ability to successfully use proper grammar and perform mechanical writing skills in their compositions. Another way of measuring writing self-efficacy involves assessing students' confidence in completing writing tasks (Pajares, 2003). Such tasks might include writing a research paper, writing a literary analysis paper, writing a short story, writing a letter, writing an email, or posting a written response in an online forum.

Self-Regulation

Self-regulation refers to the process of taking control of and evaluating one's own learning and behavior. Students' self-regulation is a predictive factor in writing competence. Students' perceived self-regulatory skills predict the confidence with which they face academic tasks. Students who have the confidence to use self-regulated learning strategies have higher intrinsic motivation and academic achievement (Shunk & Zimmerman, 1994).

Goal Orientation: Intrinsic vs. Extrinsic

An essential component of motivation is goal orientation. According to the self-determination theory of Ryan and Deci (2000), there are two basic types of motivational goals: intrinsic goals and extrinsic goals.

Intrinsic motivation is the undertaking of an activity for its inherent benefits rather than some other identifiable consequence. Intrinsic motivation exists between the

individual and the activity to be performed. That is to say not all people are motivated to do all tasks; there is a go-between that is intrinsic motivation. Because of its existence in between the individual and the task, intrinsic motivation has sometimes been defined as something being interesting or the rewards one receives from being engaged in an intrinsically motivated task. Intrinsic motivation is believed to result in long-term changes in behavior and greater persistence toward achievement (Ryan & Deci, 2000).

Although intrinsic motivation is important, intrinsic goals become less important as people exit childhood and enter adulthood (Ryan & Deci, 2000). Extrinsic goals consider the instrumental value of an activity rather than simply the enjoyment of the activity itself. However, Ryan and Deci (2000) assert that there is a widely varying gradient of autonomy found in extrinsic motivation. For instance, a student completing a writing assignment just because his parents threatened to ground him is vastly different from the student who does the writing assignment because he believes it will help them get into his chosen profession. Both of these examples involve extrinsic motivation, but in the latter there is much more choice and autonomy than the former. Since most of the work done in school is not intrinsically interesting to students, instructors must find a way to extrinsically motivate students to a point where they then become intrinsically motivated to engage in a task (Ryan & Deci, 2000).

The Present Study

The purpose of the present study was to develop a reliable, valid, and efficient psychometric instrument, the Academic Writing Motivation Questionnaire, which can be used by instructors and educational researchers to examine college students' motivation to write in composition classes and other writing-intensive classes. The Academic Writing

Motivation Questionnaire was designed to give instructors and educational researchers insight into students' writing apprehension, self-efficacy, self-regulation, and goal-orientation.

The purpose of the present study was also to examine how students' motivation, as measured by the Academic Writing Motivation Questionnaire, was related to students' gender, academic major, and amount of reading. It was assumed that these variables that may affect participants' motivation to write in an academic setting based on previous studies in the areas of writing and reading motivation.

Research shows that gender differences exist in regard to reading and writing motivation. A study by Pajares and Valiante (1997) reported that, despite no gender differences in writing performance, females had higher writing self-efficacy than males. A literature view by Meece, Glienke, and Burg (2006) concluded that, in general, females are more motivated in the feminine sex-typed areas of reading and writing while males are more motivated in the masculine sex-typed areas of mathematics, science, and sports. The gender gap in motivation related to mathematics and sciences narrows as students get older, but the gender gap in motivation related to reading and writing remains pronounced throughout the school years (Meece et al., 2006).

A relationship has been established between the kinds of courses students take, the amount of time devoted to writing in courses, and students' motivation to engage in writing and literacy activities. A longitudinal study of college students conducted by Pascarella, Pierson, and Bray (2004) examined the effect of the cumulative number of natural sciences, mathematics, social sciences, arts and humanities, and technical or professional courses on students' attitudes toward literacy activities. Their research concluded that an increase in

positive attitudes toward literacy activities during three years of college was negatively related to exposure to mathematics courses.

Grobe and Grobe (1977) found that first-year college students with relatively little reading experience in high school wrote poorly compared to their peers. Stotsky (1983) concluded that students who are better writers tended to read more. Similarly, Daane (1991) concluded that students who reported early pleasure in reading and continued exposure to literature wrote with more syntactic and semantic complexity and imaginative language than their peers who reported early frustration with reading and infrequent or no continued exposure to literature. Pascarella et al. (2004) concluded that a higher amount of reading was related to improvement in attitude toward literacy activities. The amount of reading in which a student engages relates to his or her writing ability and motivation.

In conclusion, the present study used the Academic Writing Motivation Questionnaire to answer the following questions: (1) How motivated to write are students who are enrolled typical English composition classes in a large state university, (2) Does gender influence the students' motivation to write? (3) Does choice of academic major influence the students' motivation to write? (4) Does students' amount of reading influence their motivation to write?

CHAPTER 3

Methodology

In this section, recruitment procedures and participant characteristics described. The Academic Writing Motivation Questionnaire is described and the procedure for administering the questionnaire is presented.

Participants

The sample of students for the Academic Writing Motivation Questionnaire consisted of 69 first-year students enrolled in college undergraduate courses—English 1101 and English 1102—at The University of Georgia. The course titles and their descriptions are as follows:

English 1101: First-year Composition. English 1101 focuses on informational, analytical, and argumentative writing (the principal genres of academic discourse that students will encounter in many courses across the curriculum), and on research skills and critical thinking.

English 1102: First-year Composition II. English 1102 shares the core goals, or learning outcomes, of English 1101, but includes as well other goals specific to the course. The content also varies: while English 1101 focuses on different varieties of non-fiction writing, English 1102 focuses on informational, analytical, and argumentative writing through literary texts in various genres; as in English 1101 and English 1102M, research and critical thinking skills are also emphasized.

Participation in the research was voluntary and confidential. The researcher offered no rewards or incentives in exchange for participation. Participants in the research were

recruited by the researcher in the classrooms of instructors who also volunteered to participate. The instructors allowed the researcher to come into their classrooms and give an overview of the research, obtain informed consent, and administer the Academic Writing Motivation Questionnaire.

Thirty-four participants were female and thirty-five participants were male. Reported academic majors of the participants fell into the following categories: humanities, social sciences, natural sciences, formal sciences, and applied sciences. Twenty-four participants' academic major fell into the category of humanities, three participants' academic major fell into the category of social sciences, eleven participants' academic major fell into the category of natural sciences, four participants' academic major fell into the category of formal sciences, and twenty-three participants' academic major fell into the category of applied sciences. Four participants did not report their academic major. Participants reported reading a mean of 10.74 books per year.

Academic Writing Motivation Questionnaire

A recent review of the literature on the motivational components that influence writing motivation informed the development of the Academic Writing Motivation Questionnaire. The Academic Writing Motivation Questionnaire was also influenced by existing instruments designed to assess aspects of writing motivation, such as the writing apprehension questionnaire developed by Daly and Miller (1975). And finally, five English and language arts instructors were consulted when developing the items for the questionnaire. Thus, the researcher literature, existing writing instruments, and five experts were used to ensure the Academic Writing Motivation Questionnaire had good content validity.

The Academic Writing Motivation Questionnaire, in its final form, is a 37-item, Likert-type questionnaire (see Appendix). For each item there is a statement that prompts participants to indicate their level of agreement with the statement. There is a response scale for each item that participants use to indicate their level of agreement with each statement. The response scale ranged from zero to four, and values for the scale are as follows: 0 = Strongly Disagree; 1 = Disagree; 2 = Uncertain; 3 = Agree; 4 = Strongly Agree.

Student Characteristics

The 37 items of the Academic Writing Motivation Questionnaire were followed in the present study by three items designed to collect background information about the participants. The items ask participants to report their gender, academic major, and the approximate number of books they read per year.

Procedure

The Academic Writing Motivation Questionnaire was administered to groups of 5-20 participants depending on number of participants in each instructor's class. After listening to a presentation about the research given by the researcher, the participants signed a consent form. Participants were given an opportunity to ask questions before the questionnaire was administered.

The participants were then given the 37-item Academic Writing Motivation Questionnaire. They were allowed to respond to the items at their own pace. Administration of the questionnaire took a total of approximately 10 minutes to complete, attesting to its efficiency. Students reported no difficulties in responding to the items.

CHAPTER 4

Results

The Academic Writing Motivation Questionnaire data and the student characteristic data were analyzed using SPSS version 19.0. Descriptive statistics—means, standard deviations, and correlations—are reported in this section, as well as the results of independent samples t-tests, a reliability analysis, and an exploratory factor analysis

Means and Standard Deviations of Questionnaire Items

The total score on the Academic Writing Motivation Questionnaire for each participant was calculated; the possible score range was 0 to 148. The actual total scores ranged from 20 to 140 ($M = 95.10$; $SD = 23.52$). The mean score for all participants on the response scale of 0 to 4.0 ranged from 1.45 to 3.48 ($M = 2.59$; $SD = .64$). The mean and standard deviation of each item are reported in Table 1.

Questionnaire Item Correlations

The Pearson product moment correlations among items on the Academic Writing Motivation Questionnaire were calculated. Pearson product moment correlations, even when *statistically* significant, may not be sufficiently large in terms of their effect size to be of *practical* significance. In this study, the following criteria (Morgan, Leech, Gloeckner, & Barrett, 2011) were adopted for interpreting the practical significance of correlations between items: below .30 (little relationship), .30 to .49 (moderate relationship), .50 to .69 (strong relationship), and .70 and above (very strong relationship). The correlations among items are reported in Table 2.

Table 1

Means and Standard Deviations of Each Item of the AWMQ

Item	<i>M</i>	<i>SD</i>
I enjoy writing.	2.54	1.17
I like to write down my thoughts.	2.75	1.17
I use correct grammar in my writing.	2.83	.95
I complete a writing assignment even when it is difficult.	3.41	.69
Being a good writer will help me do well academically.	3.38	.89
I write as well as other students.	3.06	.95
I write more than the minimum on writing assignments.	2.68	1.01
I put a lot of effort into my writing.	2.90	.95
I like to participate in written online discussions.	1.62	1.16
I like to get feedback from an instructor on my writing.	3.36	.82
I am able to clearly express my ideas in writing.	3.00	.93
I easily focus on what I am writing.	2.44	1.03
I like my writing to be graded.	2.50	1.28
I am more likely to succeed if I can write well.	3.28	.92
It is easy for me to write good essays.	2.57	1.08
I enjoy creative writing assignments.	2.78	1.20
I like classes that require a lot of writing.	1.65	1.21
I plan how I am going to write something before I write it.	2.43	1.04
Becoming a better writer is important to me.	2.90	1.15

Being a better writer will help me in my career.	2.97	1.29
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Table 1 *continued*

Means and Standard Deviations of Each Item of the AWMQ

It is important to me that I make an A on a writing assignment.	3.25	.87
I enjoy writing assignments that challenge me.	2.28	1.20
I revise my writing before submitting an assignment.	2.81	1.00
Punctuation is easy for me.	2.59	1.05
I enjoy writing literary analysis papers.	1.87	1.27
I like to write even if my writing will not be graded.	2.17	1.25
I like others to read what I have written.	2.06	1.22
I enjoy writing research papers.	1.45	1.21
I would like to have more opportunities to write in classes.	1.66	1.17
Being a good writer is important in getting a good job.	2.96	.98
I practice writing in order to improve my skills.	2.16	1.20
I want the highest grade in the class on a writing assignment.	2.94	.10
I would rather write an essay than answer multiple-choice questions.	1.84	1.52
I want others to recognize me as a good writer.	3.00	1.06
Spelling is easy for me.	2.68	1.13
Choosing the right word is easy for me.	2.53	1.00
I am motivated to write in my classes.	2.55	1.02

Table 2
Correlations Among AWMQ Items

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Q1	1.000	.670	.402	.278	.619	.643	.225	.379	.499
Q2	.670	1.000	.165	-.011	.506	.333	.062	.093	.229
Q3	.402	.165	1.000	.498	.391	.573	.161	.251	.165
Q4	.278	-.011	.498	1.000	.366	.386	.225	.398	-.027
Q5	.619	.506	.391	.366	1.000	.520	.216	.474	.378
Q6	.643	.333	.573	.386	.520	1.000	.210	.331	.366
Q7	.225	.062	.161	.225	.216	.210	1.000	.612	.368
Q8	.379	.093	.251	.398	.474	.331	.612	1.000	.416
Q9	.499	.229	.165	-.027	.378	.366	.368	.416	1.000
Q10	.283	.284	.369	.266	.373	.109	.359	.334	.100
Q11	.492	.397	.611	.437	.336	.576	.233	.374	.123
Q12	.287	.117	.488	.504	.295	.539	.335	.468	.142
Q13	.078	-.127	.293	.368	.422	.215	.216	.488	.153
Q14	.492	.409	.231	.051	.628	.272	-.119	.095	.313
Q15	.595	.295	.394	.356	.583	.716	.254	.416	.459
Q16	.621	.455	.134	.153	.455	.413	.139	.278	.401
Q17	.664	.387	.336	.218	.459	.545	.341	.503	.552
Q18	.242	.124	.057	.041	.213	.251	.145	.172	.123
Q19	.636	.505	.364	.139	.723	.390	.315	.493	.550
Q20	.601	.452	.229	.135	.661	.314	.285	.510	.505
Q21	.312	.167	.394	.375	.344	.419	.225	.297	.252
Q22	.732	.483	.404	.319	.612	.579	.287	.500	.483
Q23	.167	.013	.372	.460	.266	.386	.195	.387	.093
Q24	.455	.415	.627	.368	.461	.615	.062	.113	.318
Q25	.587	.319	.323	.101	.551	.417	.290	.487	.564
Q26	.715	.570	.319	.288	.438	.499	.307	.400	.470
Q27	.525	.386	.055	.074	.435	.361	.209	.448	.411
Q28	.377	.269	.105	.041	.395	.231	.213	.384	.279
Q29	.663	.407	.264	.275	.448	.453	.371	.428	.406
Q30	.540	.407	.215	.066	.546	.285	.022	.227	.197
Q31	.486	.247	.173	.219	.437	.336	.257	.355	.505
Q32	.233	.346	.347	.194	.393	.334	.135	.056	.174
Q33	.646	.425	.410	.171	.497	.515	.320	.498	.562
Q34	.648	.491	.297	.100	.567	.474	.233	.202	.487
Q35	.194	.129	.455	.189	.123	.254	.015	.193	-.082
Q36	.260	.038	.538	.455	.291	.541	.156	.357	.150
Q37	.685	.304	.329	.506	.545	.506	.319	.450	.428

Table 2 continued
 Correlations Among AWMQ Items

	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
Q1	.283	.492	.287	.078	.492	.595	.621	.664	.242
Q2	.284	.397	.117	-.127	.409	.295	.455	.387	.124
Q3	.369	.611	.488	.293	.231	.394	.134	.336	.057
Q4	.266	.437	.504	.368	.051	.356	.153	.218	.041
Q5	.373	.336	.295	.422	.628	.583	.455	.459	.213
Q6	.109	.576	.539	.215	.272	.716	.413	.545	.251
Q7	.359	.233	.335	.216	-.119	.254	.139	.341	.145
Q8	.334	.374	.468	.488	.095	.416	.278	.503	.172
Q9	.100	.123	.142	.153	.313	.459	.401	.552	.123
Q10	1.000	.353	.104	.358	.031	.100	.077	.093	.060
Q11	.353	1.000	.502	.189	.057	.465	.359	.258	.107
Q12	.104	.502	1.000	.172	.082	.454	.249	.318	.028
Q13	.358	.189	.172	1.000	.213	.304	-.023	.278	-.038
Q14	.031	.057	.082	.213	1.000	.389	.320	.378	.065
Q15	.100	.465	.454	.304	.389	1.000	.542	.551	.130
Q16	.077	.359	.249	-.023	.320	.542	1.000	.471	.067
Q17	.093	.258	.318	.278	.378	.551	.471	1.000	.293
Q18	.060	.107	.028	-.038	.065	.130	.067	.293	1.000
Q19	.211	.216	.269	.244	.598	.418	.450	.617	.140
Q20	.168	.162	.291	.225	.580	.416	.477	.534	.015
Q21	.360	.402	.206	.321	-.085	.289	.153	.196	-.029
Q22	.212	.364	.312	.356	.454	.601	.553	.799	.204
Q23	.198	.319	.392	.302	.039	.239	.032	.230	.197
Q24	.157	.413	.303	.161	.313	.490	.321	.416	.053
Q25	.044	.244	.203	.233	.412	.447	.451	.669	.188
Q26	.068	.323	.268	-.052	.320	.568	.601	.675	.224
Q27	.286	.255	.098	.288	.337	.347	.342	.475	.199
Q28	.114	.125	.204	.170	.306	.213	.252	.565	.287
Q29	.220	.254	.320	.182	.347	.369	.483	.815	.253
Q30	.053	.162	.097	.066	.623	.345	.372	.359	.224
Q31	.015	.076	.319	.202	.384	.398	.346	.533	.369
Q32	.438	.340	.088	.220	.197	.277	.221	.172	-.085
Q33	.177	.392	.370	.212	.377	.524	.477	.790	.198
Q34	.031	.272	.136	-.019	.512	.533	.588	.599	.207
Q35	.173	.462	.235	-.029	-.056	.060	.070	.047	-.042
Q36	.138	.566	.524	.197	-.002	.405	.300	.312	.054
Q37	.127	.309	.316	.323	.456	.583	.553	.706	.213

Table 2 continued
 Correlations Among AWMQ Items.

	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27
Q1	.636	.601	.312	.732	.167	.455	.587	.715	.525
Q2	.505	.452	.167	.483	.013	.415	.319	.570	.386
Q3	.364	.229	.394	.404	.372	.627	.323	.319	.055
Q4	.139	.135	.375	.319	.460	.368	.101	.288	.074
Q5	.723	.661	.344	.612	.266	.461	.551	.438	.435
Q6	.390	.314	.419	.579	.386	.615	.417	.499	.361
Q7	.315	.285	.225	.287	.195	.062	.290	.307	.209
Q8	.493	.510	.297	.500	.387	.113	.487	.400	.448
Q9	.550	.505	.252	.483	.093	.318	.564	.470	.411
Q10	.211	.168	.360	.212	.198	.157	.044	.068	.286
Q11	.216	.162	.402	.364	.319	.413	.244	.323	.255
Q12	.269	.291	.206	.312	.392	.303	.203	.268	.098
Q13	.244	.225	.321	.356	.302	.161	.233	-.052	.288
Q14	.598	.580	-.085	.454	.039	.313	.412	.320	.337
Q15	.418	.416	.289	.601	.239	.490	.447	.568	.347
Q16	.450	.477	.153	.553	.032	.321	.451	.601	.342
Q17	.617	.534	.196	.799	.230	.416	.669	.675	.475
Q18	.140	.015	-.029	.204	.197	.053	.188	.224	.199
Q19	1.000	.878	.151	.695	.185	.433	.720	.547	.551
Q20	.878	1.000	.130	.658	.176	.342	.692	.537	.563
Q21	.151	.130	1.000	.308	.299	.409	.101	.254	.196
Q22	.695	.658	.308	1.000	.386	.437	.674	.705	.470
Q23	.185	.176	.299	.386	1.000	.275	.221	.134	-.026
Q24	.433	.342	.409	.437	.275	1.000	.321	.506	.162
Q25	.720	.692	.101	.674	.221	.321	1.000	.532	.418
Q26	.547	.537	.254	.705	.134	.506	.532	1.000	.364
Q27	.551	.563	.196	.470	-.026	.162	.418	.364	1.000
Q28	.464	.505	-.014	.544	.210	.139	.550	.301	.426
Q29	.554	.511	.188	.720	.217	.303	.569	.572	.499
Q30	.662	.637	-.026	.449	-.007	.343	.371	.335	.421
Q31	.555	.470	.082	.548	.147	.214	.508	.474	.278
Q32	.102	.042	.519	.179	.000	.374	-.027	.180	.241
Q33	.584	.580	.219	.712	.305	.434	.719	.599	.320
Q34	.671	.552	.174	.575	.079	.465	.601	.510	.319
Q35	.141	.116	.144	.009	-.078	.217	.211	.037	.178
Q36	.247	.193	.223	.273	.215	.408	.197	.204	.101
Q37	.515	.469	.305	.718	.313	.381	.500	.629	.292

Table 2 *continued*
Correlations Among AWMQ Items

	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Q36	Q37
Q1	.377	.663	.540	.486	.233	.646	.648	.194	.260	.685
Q2	.269	.407	.407	.247	.346	.425	.491	.129	.038	.304
Q3	.105	.264	.215	.173	.347	.410	.297	.455	.538	.329
Q4	.041	.275	.066	.219	.194	.171	.100	.189	.455	.506
Q5	.395	.448	.546	.437	.393	.497	.567	.123	.291	.545
Q6	.231	.453	.285	.336	.334	.515	.474	.254	.541	.506
Q7	.213	.371	.022	.257	.135	.320	.233	.015	.156	.319
Q8	.384	.428	.227	.355	.056	.498	.202	.193	.357	.450
Q9	.279	.406	.197	.505	.174	.562	.487	-.082	.150	.428
Q10	.114	.220	.053	.015	.438	.177	.031	.173	.138	.127
Q11	.125	.254	.162	.076	.340	.392	.272	.462	.566	.309
Q12	.204	.320	.097	.319	.088	.370	.136	.235	.524	.316
Q13	.170	.182	.066	.202	.220	.212	-.019	-.029	.197	.323
Q14	.306	.347	.623	.384	.197	.377	.512	-.056	-.002	.456
Q15	.213	.369	.345	.398	.277	.524	.533	.060	.405	.583
Q16	.252	.483	.372	.346	.221	.477	.588	.070	.300	.553
Q17	.565	.815	.359	.533	.172	.790	.599	.047	.312	.706
Q18	.287	.253	.224	.369	-.085	.198	.207	-.042	.054	.213
Q19	.464	.554	.662	.555	.102	.584	.671	.141	.247	.515
Q20	.505	.511	.637	.470	.042	.580	.552	.116	.193	.469
Q21	-.014	.188	-.026	.082	.519	.219	.174	.144	.223	.305
Q22	.544	.720	.449	.548	.179	.712	.575	.009	.273	.718
Q23	.210	.217	-.007	.147	.000	.305	.079	-.078	.215	.313
Q24	.139	.303	.343	.214	.374	.434	.465	.217	.408	.381
Q25	.550	.569	.371	.508	-.027	.719	.601	.211	.197	.500
Q26	.301	.572	.335	.474	.180	.599	.510	.037	.204	.629
Q27	.426	.499	.421	.278	.241	.320	.319	.178	.101	.292
Q28	1.000	.597	.294	.385	-.103	.435	.245	.106	.161	.382
Q29	.597	1.000	.288	.562	.210	.645	.477	.038	.277	.645
Q30	.294	.288	1.000	.416	.051	.359	.628	.140	.138	.377
Q31	.385	.562	.416	1.000	.000	.481	.453	-.145	.128	.614
Q32	-.103	.210	.051	.000	1.000	.139	.290	-.031	.160	.155
Q33	.435	.645	.359	.481	.139	1.000	.627	.096	.371	.599
Q34	.245	.477	.628	.453	.290	.627	1.000	.102	.200	.596
Q35	.106	.038	.140	-.145	-.031	.096	.102	1.000	.452	-.022
Q36	.161	.277	.138	.128	.160	.371	.200	.452	1.000	.298
Q37	.382	.645	.377	.614	.155	.599	.596	-.022	.298	1.000

Student Characteristic Comparisons

Gender. An independent samples *t*-test was conducted to compare total scores for females ($n = 34$) and males ($n = 35$). There was no significant difference in scores for females ($M = 99.21$; $SD = 21.85$) and scores for males ($M = 91.11$; $SD = 24.89$), $t(67) = 1.44$, $p > .05$.

Academic Major. Means and standard deviations of total scores were computed for academic majors. Participant data were divided into categories depending on reported academic major, with humanities ($n = 24$), social sciences ($n = 3$), natural sciences ($n = 11$), formal sciences ($n = 4$), and applied sciences ($n = 23$) included in the analysis. Four participants did not report their academic major. Means and standard deviations for each academic major category are reported in Table 3. Means of each academic major category ranged from 78.0 to 111.92. An independent samples *t*-test was conducted to compare total scores for humanities majors ($n = 24$) and all other majors ($n = 41$). There was a significant difference in scores between the humanities majors ($M = 111.92$; $SD = 16.22$) and all other majors ($M = 86.71$; $SD = 22.69$), $t(63) = -4.77$, $p < .05$.

Reading Amount. Means and standard deviations were computed for amount of reading. The mean number of books read per year was 10.74 ($SD = 14.74$). One participant did not report number of books read per year. Reading amount and total scores were significantly correlated, $r(66) = .41$, $p < .01$. Participant data were then divided into four groups that reflect a range of reported number books read per year, with participants who read zero to four books per year ($n = 24$), participants who read five to nine books per year ($n = 19$), participants who read ten to nineteen books per year ($n = 14$) and participants who read more than twenty books per year ($n = 11$) included in the

Table 3

AWMQ Score Means and Standard Deviations for Each Academic Major Category

Academic Major	<i>M</i>	<i>SD</i>
Humanities	111.92	16.22
Social sciences	86.67	15.28
Natural sciences	80.09	24.19
Formal sciences	78.00	4.97
Applied sciences	91.39	24.23

Table 4

AWMQ Means and Standard Deviations for Each Amount of Reading Group

Amount of Reading	<i>M</i>	<i>SD</i>
0-4 books per year	80.58	23.97
5-9 books per year	95.58	14.17
10-19 books per year	106.21	24.57
20+ books per year	112.64	16.36

analysis. Means and standard deviations for each group are reported in Table 4. Means for each amount of reading category ranged from 80.58 to 112.64. An independent samples *t*-test was conducted to compare total scores of participants who read less than ten books per year ($n = 43$) and participants who read ten or more books per year ($n = 25$). There was a significant difference in scores for participants who read less than ten books per year ($M = 87.21$; $SD = 21.39$) and participants who read ten or more books per year ($M = 109.04$; $SD = 21.19$), $t(66) = 4.07$, $p < .05$.

Reliability Analysis

Cronbach's alpha, a coefficient of reliability, was used to measure the internal consistency of the Academic Writing Motivation Questionnaire for this sample of students. The reliability analysis yielded a coefficient alpha of .95, which is considered excellent. The reliability analysis indicated that the exclusion of any given item would not significantly increase its reliability.

Exploratory Factor Analysis

An exploratory factor analysis—a principal component analysis with a Varimax rotation—was used to identify sets of items that have common characteristics that represent underlying latent variables (Pett, Lackey, & Sullivan, 2003). The proportion of variance accounted for by each of the factors was determined.

The factor loadings from the principal components analysis are in Table 5. All of the items (in boldface) met the criterion of loading at least .35. Items loaded into eight factors, which together accounted for 73.69% of the variance in the responses. The main factors—

there were five—were named based on conceptual similarities of their items. Factor 6 was not named because its three items did not clearly represent a latent variable, and factors 7 and 8 were not named because each was comprised of only one item.

Factor 1 contained items that were related to intrinsic motivation. Factor 1 contained thirteen items which examined participants' enjoyment or apprehension to engage in writing activities. This factor was named *Enjoyment*. This factor was the most important in understanding participants' academic writing motivation. It included the most items and accounted for 35.27% of the variance.

Factor 2 contained items that were related to self-efficacy. Factor 2 contained eight items which assessed participants' beliefs about their writing ability. This factor was consequently named *Self-efficacy*. It accounted for 10% of the variance.

Factors 3 and 4 contained items that were related to extrinsic motivation. Factor 3 contained five items that related to participants' beliefs about writing as a means of achieving success. Thus, this factor was named *Instrumentality*. Factor 4 contained four items that primarily related to receiving rewards for writing or feedback on writing. This factor was named *Recognition*. Factors 3 and 4 accounted for 6.39% and 5.12% of the variance, respectively.

Factor 5 contained items that were related to effort. Factor 5 contained 3 items that primarily had to do with the effort put forth to tackle a writing task. This factor was consequently named *Effort*. It accounted for 4.56% of the variance.

Factors 6, with 3 items, accounted for 4.22% of the variance. Factors 7 and 8, each with 1 item, accounted for 3.36% and 2.78% of the variance, respectively.

Table 5
Exploratory Factor Analysis of AWMQ Responses

	Factor							
	1	2	3	4	5	6	7	8
Q17	.820	.200	.180	.067	.123	.032	-.024	.228
Q33	.800	.246	.172	.083	.053	.053	.104	.092
Q25	.779	.081	.320	-.098	.125	.137	.211	.024
Q9	.763	-.029	.098	.134	.188	-.008	-.095	-.211
Q22	.708	.265	.357	.171	.117	.089	-.073	.219
Q26	.672	.269	.179	.163	.043	-.335	-.100	.165
Q29	.663	.157	.187	.120	.239	-.034	-.019	.369
Q34	.613	.152	.462	.141	-.134	-.246	-.025	-.004
Q1	.582	.279	.427	.279	.066	-.284	.058	.248
Q37	.556	.427	.312	.093	.122	-.012	-.341	.188
Q31	.519	.186	.335	-.137	.151	.024	-.330	.249
Q28	.486	-.033	.263	-.157	.241	.196	.224	.426
Q4	-.045	.760	.094	.180	.165	.193	-.164	.121
Q12	.172	.753	.032	-.074	.220	.026	.067	.012
Q36	.166	.728	.016	.008	.070	-.008	.323	-.075
Q11	.128	.645	.047	.377	.101	-.151	.356	.131
Q6	.453	.629	.145	.268	-.110	-.049	.063	.121
Q3	.233	.614	.126	.340	-.193	.275	.350	.007
Q15	.459	.553	.294	.172	.055	-.131	-.201	-.095
Q24	.410	.431	.221	.392	-.384	.066	.141	-.051
Q30	.202	.101	.816	-.059	-.033	-.135	.077	.117
Q14	.276	.004	.815	.044	-.189	.073	-.127	.001
Q5	.326	.277	.683	.334	.143	.124	-.028	.082
Q20	.551	.063	.654	-.029	.274	.047	.132	-.087
Q19	.595	.086	.653	.047	.186	.076	.152	-.005
Q32	.055	.109	.109	.839	-.022	-.088	-.097	-.124
Q21	.203	.296	-.113	.682	.093	.143	-.020	-.091
Q10	-.065	.052	.126	.662	.416	.173	.207	.190
Q2	.341	-.028	.411	.421	-.077	-.408	.180	.272
Q8	.370	.361	.138	.028	.708	.201	.056	.038
Q7	.354	.170	-.161	.142	.660	.018	-.041	.023
Q27	.315	-.068	.448	.239	.458	-.117	.175	.140
Q13	.058	.221	.246	.256	.352	.646	-.149	-.121
Q23	.198	.441	-.067	.097	-.011	.532	-.102	.300

Table 5 *continued**Exploratory Factor Analysis of AWMQ Responses*

Q16	.473	.283	.310	.102	.111	-.505	-.107	-.034
Q35	-.047	.352	.083	.005	.062	-.110	.807	-.047
Q18	.160	.057	.044	-.057	.019	-.021	-.068	.776

Note. Boldfaced items are those associated with a factor.

CHAPTER 5

Discussion

A reliable, valid, and efficient measure of college students' motivation to write in composition classes and other writing-intensive classes was developed. The Academic Writing Motivation Questionnaire can help instructors and researchers assess and gain an understanding of students' academic writing motivation.

The questionnaire has high internal consistency, as indicated by a Cronbach reliability coefficient of .95. The questionnaire also has good content validity. The development of the Academic Writing Motivation Questionnaire was guided by the existing literature on writing motivation, existing measures of students' writing attitudes, and the advice of instructors. These sources all contributed to the content validity of the questionnaire.

Students' Scores on the Academic Writing Motivation Questionnaire

The mean score on the Academic Writing Motivation Questionnaire was 2.59 on a 0 to 4 scale. This was .59 higher than the mid-point of the response scale, 2 which represented "sometimes motivated to write." This indicated that, overall, the students who participated in this study were more motivated to write than not. There were, in fact, only six (16%) out of the 37 items on the questionnaire on which the participants' mean scores were lower than 2.

The item on which the participants had the lowest mean score was, "I enjoy writing research papers." It was not surprising that the participants reported low motivation to engage in writing research papers. Traditionally, research papers have received criticism

for being unoriginal and for eliciting dread and apathy in both students and teachers (Moulton, 1999). Often, students are apathetic and unconcerned when it comes to writing research papers because they are not writing anything of personal interest or that they “have been trained to write within such a narrow framework that they write with no conviction, merely citing facts and figures” (Baird, 1992, p. 67). In general, instructors should focus on making writing assignments more relevant to students’ lives and interests.

Another item on which students scored particularly low was, “I like to participate in written online discussions.” This finding is interesting because it is inconsistent with the findings of several studies. For example, De Bernardi and Antolini (2007) reported that students in their study enjoyed using the computer and the Internet to complete writing assignments. Hidi, Ainley, Berndorff, and Favero (2007) suggested that students’ interest in leaning and writing online may have to do with the novelty of the medium and that interest is not necessarily maintained over time. Future studies on students’ motivation to write online and, specifically, to participate in online written discussions would be useful.

The Academic Writing Motivation Questionnaire item on which students scored the highest was, “I complete a writing assignment even when it is difficult.” This response implies that many participants in this study are self-regulated learners who take on challenging tasks and exert effort to achieve academic success. External motivators such as making good grades and graduating from college may have an effect on college students’ motivation to complete difficult writing assignments.

Other items on which students scored notably high were: “Being a good writer will help me do well academically,” “I like to get feedback from an instructor on my writing,” “I am more likely to succeed if I can write well,” and “It is important to me that I make an A on

a writing assignment.” Most of these items have to do with extrinsic motivation, which manifests itself in college students in their preoccupation with grades. Many instructors are unhappy to find that college students are more focused on extrinsic goals than intrinsic ones (Ryan & Deci, 2000).

Writing Motivation Factors

The exploratory factor analysis yielded five primary factors of writing motivation: Enjoyment, self-efficacy, instrumentality, recognition, and effort. The *enjoyment* factor was comprised of the largest number of items on the Academic Writing Motivation Questionnaire. Thirteen items—accounting for 37% of the variance in the responses—made up the *enjoyment* factor, making it the most important component of writing motivation. Enjoyment is an aspect of intrinsic motivation, which Ryan and Deci (2000, p. 55) define as “doing something because it is inherently interesting or enjoyable.” Intrinsic motivation results in high-quality learning; there is considerable educational value in focusing on the intrinsic motivation of a skill as important as writing.

Self-efficacy was the second most important factor of writing motivation. The *self-efficacy* factor was made up of eight items. Self-efficacy beliefs are defined as “personal beliefs about one’s capabilities to organize and implement actions necessary for attaining designated levels of performance” (Bandura, 1986, p. 391). The self-efficacy items assess students’ confidence in their ability to successfully use proper grammar and perform mechanical writing skills as well as their confidence in performing other writing operations. Students may not have the same level of self-efficacy across all operations and domains of writing (Pajares,2003).

Items associated with extrinsic motivation made up Factors 3 and 4. The items in Factor 3 were associated with *instrumentality* and the items in Factor 4 were associated with personal *recognition*. The latter items had to do with receiving a good grade or getting feedback on a writing assignment. As noted previously, extrinsic motivation becomes increasingly important to students the older they get. According to Ryan and Deci (2000, p. 60), adulthood brings with it “social demands and roles that require individuals to assume responsibility for nonintrinsically interesting tasks.”

Items related to *effort* comprised Factor 5. Educational settings in which individuals perceive their efforts as autonomous and self-regulated facilitate learning, well-being, and the development of adaptive worldviews. According to Malmberg and Little (2007), as children get older they are able to differentiate between ability, effort, and task difficulty, and “ability begins to relate to performance as a function of effort” (741).

Student Characteristics

Research with children have found gender differences in regard to reading and writing motivation (Meece, 2006), but little research has been done with college students because a questionnaire such as the Academic Writing Motivation Questionnaire has not previously been available. The present findings indicated that male and female participants did not differ in terms of total scores on the Academic Writing Motivation Questionnaire. This finding should be explored in future research. In particular, possible differences between males and females on the factors of the questionnaire should be explored. With respect to the present findings, it should also be kept in mind that the majority of the participants were humanities majors. The humanities are sex-typed feminine areas of

study (Meece, 2006; Pajares & Valiante, 2001); therefore, those participants, female and male, may have a more feminine orientation.

When the questionnaire total score means for each academic major category were computed, humanities was the academic major with the highest mean. Formal sciences had the lowest mean. There was a significant difference in the motivation to write for humanities majors versus all other majors. Humanities courses—especially English—generally require students to write often and in large quantities. It is reasonable, therefore, that the scores for humanities majors on the Academic Writing Motivation Questionnaire were higher than those of the other majors. Related to this finding is a study by Pascarella et al. (2004) who found that an increase in positive attitudes toward literacy activities during three years of college was negatively related to exposure to mathematics courses.

The participants in this study were asked to estimate how many books they read per year so that the number of books read could be compared to the participants' motivation to write. There was a significant positive relationship between reading frequency and total scores on the Academic Writing Motivation Questionnaire, which suggests that students who read more are more motivated to write. Thus, the present study suggests that students who read more are more motivated to write. Related to this is the finding that students who read more are better writers (Daane, 1991; Grobe & Grobe, 1977; Stotsky, 1983).

Limitations and Suggestions for Future Research

The limitations of the present study suggest a number of directions for future research. First, the Academic Writing Motivation Questionnaire was developed in light of the research literature and the advice of writing instructors to ensure content validity, but

other forms of validity, such as criterion-related validity and construct validity, should be established in future research.

Second, the sample size obtained ($n = 69$) was large enough for the purposes of this study, but with an increased sample size the data would be more generalizable. A larger sample size would facilitate the differentiation of the questionnaire into subscales using the exploratory factor analysis findings. If one were to do this, one could make subscales containing items focusing on extrinsic motivation, intrinsic motivation, apprehension, self-regulation, and self-efficacy. This break down of the questionnaire into subscales would also allow for greater understanding of students' motivation to write in an academic setting.

Third, this study was also limited to quantitative data. While this quantitative data was certainly informative, qualitative data obtained by interviews of students and student observations would be informative. In particular, it would be informative to ask students in interviews to explain their responses to the items of the questionnaire. It would also be informative to note if students' actual writing behavior is consistent with what they report on the questionnaire.

Fourth, the Academic Writing Motivation Questionnaire should be used to explore specific genres or settings in which writing occurs. For example, participants in this study scored very low on the item pertaining to writing in online class discussions. Asking students in an online English class to respond to the questionnaire specifically from the perspective of online writing could be very informative. Due to the rise of technology use and the implementation of online writing platforms in many college classes, there is a great need to see if such platforms affect students' motivation to write.

Fifth, the Academic Writing Motivation Questionnaire was designed for undergraduate college students, but a study in which the questionnaire was administered to high school students would be useful to high school English instructors. The items on the questionnaire appear to be generally applicable to high school students, but this needs to be verified with a high school sample. Items might need to be deleted, revised, or added.

Finally, in future research, professional writers such as book authors should be asked to respond to the Academic Writing Motivation Questionnaire. Administering the questionnaire to this population of writers could provide insight into what motivates professionals to—in Ernest Hemmingway’s words—“sit down at a typewriter and bleed.” Knowing what motivates professionals could be very useful information to instructors engaged in the task of motivating students to sit down at a computer and write.

Conclusion

A major goal of college writing instructors and writing researchers is to help students learn to write effectively. Writing is an important skill in all academic disciplines and professional careers. College students’ motivation to write contributes to their success in college courses and, later, in their professional careers. To help instructors determine the writing motivation of their students, the Academic Writing Motivation Questionnaire was developed in this study. The questionnaire can also help researchers study the writing process. A better understanding of writing motivation can lead to the creation of new writing instructional strategies that foster excellence in writing.

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APPENDIX

ACADEMIC WRITING MOTIVATION QUESTIONNAIRE (AWMQ)

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In order to better understand what you think and how you feel about the writing you do in your courses, please respond to each of the following statements by circling the number in one of the boxes or providing the requested information. Thank you!

Statements	Strongly Disagree 0	Disagree 1	Uncertain 2	Agree 3	Strongly Agree 4
01. I enjoy writing.	0	1	2	3	4
02. I like to write down my thoughts.	0	1	2	3	4
03. I use correct grammar in my writing.	0	1	2	3	4
04. I complete a writing assignment even when it is difficult.	0	1	2	3	4
05. Being a good writer will help me do well academically.	0	1	2	3	4
06. I write as well as other students.	0	1	2	3	4
07. I write more than the minimum on writing assignments.	0	1	2	3	4
08. I put a lot of effort into my writing.	0	1	2	3	4
09. I like to participate in written online discussions.	0	1	2	3	4
10. I like to get feedback from an instructor on my writing.	0	1	2	3	4
11. I am able to clearly express my ideas in writing.	0	1	2	3	4
12. I easily focus on what I am writing.	0	1	2	3	4
13. I like my writing to be graded.	0	1	2	3	4
14. I am more likely to succeed if I can write well.	0	1	2	3	4
15. It is easy for me to write good essays.	0	1	2	3	4
16. I enjoy creative writing assignments.	0	1	2	3	4
17. I like classes that require a lot of writing.	0	1	2	3	4
18. I plan how I am going to write something before I write it.	0	1	2	3	4
19. Becoming a better writer is important to me.	0	1	2	3	4
20. Being a better writer will help me in my career.	0	1	2	3	4
21. It is important to me that I make an A on a writing assignment.	0	1	2	3	4
22. I enjoy writing assignments that challenge me.	0	1	2	3	4
23. I revise my writing before submitting an assignment.	0	1	2	3	4
24. Punctuation is easy for me.	0	1	2	3	4
25. I enjoy writing literary analysis papers.	0	1	2	3	4
26. I like to write even if my writing will not be graded.	0	1	2	3	4

27. I like others to read what I have written.	0	1	2	3	4
28. I enjoy writing research papers.	0	1	2	3	4
29. I would like to have more opportunities to write in classes.	0	1	2	3	4
30. Being a good writer is important in getting a good job.	0	1	2	3	4
31. I practice writing in order to improve my skills.	0	1	2	3	4
32. I want the highest grade in the class on a writing assignment.	0	1	2	3	4
33. I would rather write an essay than answer multiple-choice questions.	0	1	2	3	4
34. I want others to recognize me as a good writer.	0	1	2	3	4
35. Spelling is easy for me.	0	1	2	3	4
36. Choosing the right word is easy for me.	0	1	2	3	4
37. I am motivated to write in my classes.	0	1	2	3	4
General Background Information					
I am a ___ female ___ male (please check)					
The number of non-required books I read for pleasure each year is about ___ (please estimate)					
My academic major (or intended major) is _____					

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