POSTPONEMENT BEHAVIOUR AND LEARNING HABITS IN HIGHER EDUCATION STUDENTS

A. Amsrud¹, M.L. Amundsen¹, P.E. Garmannslund²

¹ University college of Southeast Norway (NORWAY)
² University of Agder (NORWAY)

Abstract

This article utilises as its point of departure a web-based study that includes 281 Norwegian students who are enrolled in practical-pedagogical education courses (PPU) (in Norwegian: “praktisk-pedagogisk utdanning”). Of these students, 127 are women and 154 are men. Findings indicate that despite the fact that the students had previously earned a bachelor’s or master’s degree, they struggle to a large extent with postponement behaviour.

Approximately three out of ten students (33%) reported that they often delay completing schoolwork until the “last minute”. Roughly half of the students (49%) said they often postpone reading curriculum literature, and only about three out of ten (33%) claimed to regularly read curriculum literature. Additionally, half of the students (50%) expressed feelings of guilt after postponing study work they know they must complete, and seven out of ten (70%) experienced stress as a result. Male students struggled with postponement behaviour to a greater extent than did female students, while men with bachelor’s degrees struggled more than men with higher levels of education.

Keywords: Students’ learning habits, postponement behaviour, study performance.

1 INTRODUCTION

In Norway, regular teacher education programs require five years of study and result in the achievement of one of various master’s degrees relevant to the field of teaching. Alternatively, students can complete a bachelor’s or master’s program in a subject relevant to teaching and thereafter enrol in a one-year education program—a practical pedagogical education (PPU) program—which is comparable to the British Postgraduate Certificate in Education (PGCE). Pursuing a PPU is one of two career paths that lead to the protected title of “teacher”, and such a course is mainly designed for students who want to work with secondary school to higher education pupils.

In both the framework plan (2015) and the national guidelines for PPU programs, it is emphasised that such courses of study should be of high quality and should be directed towards preparing students to take on a teaching profession; thus, courses must be practical and relevant. Such programs, which qualify students to teach in 8th to 13th grade classrooms, should have a pedagogical platform that includes 30 credits in pedagogy. Additionally, it is assumed that such programs will be built upon professionally-relevant learning methods that will, among other things, stimulate the students’ ability to learn.

PPU courses of study are currently offered by several colleges and universities in Norway as either full-time or part-time programs. In the framework plan for 5-year teacher training and practical pedagogical education programs for grades 8–13, it is emphasised that study should be directed towards profession training and should include both research- and experience-based education that is of high professional quality. In this context, it is not only relevant to identify the basis for achieving the goal of high academic quality, but also to pinpoint the ideal foundation for a learning situation that stimulates students’ ability to learn. If one is to encourage the best possible learning outcomes, it is advantageous to know which approaches best enable students’ development of healthy learning and study habits.

Previous research has revealed evidence that positive learning behaviour extends beyond one’s cognitive abilities and facilities (Corno, 2004; Duckworth & Seligman, 2005). One means of considering a successful learning behaviour is to compare that behaviour with “good” working habits (Corno, 2008). Additionally, the routines and habits that students maintain in terms of study session frequency, reviewing practices, the tendency to repeat learned subjects and the ability to ensure a supportive study environment also contribute to successful learning behaviour (Credé & Kuncel, 2008; Ozsoy, Memis, & Temur, 2009). Corno (2008:201) described these as “study habits” and likened them...
to skills that are developed through experience; he argued that they “…comprise the strategies and
tactics for completing academic tasks that become honed through experience.”

With this background in mind, this article strives to examine students’ learning and working habits. The
point of departure is therefore the following issue: What characterises the learning and working habits
of Norwegian PPU students?

1.1 Students’ working habits

With regard to students’ working habits, Jackson, Weiss, Lundquist and Hooper (2003) showed that
there is a negative correlation between the adoption of postponement behaviour and study performance.
This corresponds to the work of Balkis et al. (2013), who also found that postponement
behaviour often leads to weak study performance. Indeed, they indicated that a significant effect of the
adoption of postponement behaviour is that a student will over- or underestimate the amount of time
needed to complete a work or study assignment.

Students who embrace postponement behaviour tend to spend less time on their studies than
students who do not procrastinate (Ferrari, 2001; Harriott & Ferrari, 1996; Jackson et al., 2003).
Additionally, Harriott and Ferrari (1996) showed that in the normal population, the adoption of
postponement behaviour has an estimated prevalence of 15–20%, while Ellis and Knaus (1977) found
that among students, postponement behaviour prevalence is estimated to be approximately 95%. This
high prevalence among American students in particular results in long filing deadlines, unclear working
hours, performance anxiety and expectation pressure.

Students who make use of postponement behaviour are often characterised by a reduced ability to
control their use of time. That is to say, they are less able to regulate their time spent completing a
project; moreover, after a project is completed, they are less able to evaluate their own use of time.
Students who adopt postponement behaviour also spend less time studying (Kuncel et al., 2004,
Jackson et al., 2003).

Following a literature review of 344 studies, Credé and Kuncel (2008) concluded that the following
three dimensions are particularly important to the development of students’ learning and work habits:
study skills, study habits and study attitudes. When we speak of “study skills”, we often refer to
students’ knowledge of appropriate learning strategies and methods as well as their ability to manage
time and resources; this capability is viewed as a prerequisite for meeting program requirements
(Credé & Kuncel, 2008). “Study habits” refer to routines that include, but are not limited to, study
session frequency, the tendency to review learning materials, self-testing proclivity, the propensity to
repeat learned teaching materials, and the ability to establish a supportive learning environment. And
finally, “study attitudes” indicate the extent to which students have a positive attitude towards their
particular study situation, their teachers and their school’s goals.

Strong performance is often the result of healthy learning strategies, good control over one’s use of
time and the ability to focus on the development of learning-enhancing behaviour. Satisfactory
academic performance is generally grounded in adequate study efforts, appropriate learning strategies
and internal motivation to pursue the subject and the study work. Various factors surrounding the
learning process are, as a rule, multifaceted and complex, and what engages and motivates students
in the “here and now” will also be affected by their life situations, previous knowledge and experience
backgrounds.

Gettinger and Seibert (2002) considered study skills to be tools for learning. In the Norwegian context,
the concept of learning strategies is most often used to describe students’ study skills (Elstad &
Turmo, 2006). Learning strategies imply that students must perform a logical sequence of actions in
order to solve a given task. Good learning strategies allow tasks to become more manageable for
students, which again emphasises the importance of developing healthy learning strategies (Margolis
& McCabe, 2004).

2 METHODOLOGY

2.1 Selection

In this study, 281 PPU student participants were recruited, distributed as 127 women and 154 men.
These participants were recruited from four different teacher education institutions in Norway.


2.2 Procedure

A questionnaire was developed, which the student participants were asked to complete. The questionnaire consisted of 101 statements/items. Eight items were used to identify background variables such as gender, educational background, parents’ educational background and linguistic background. The remaining 93 statements were broadly divided into two main groups. The first and largest group included statements concerning competence goals, which were derived from the study’s framework plan and national guidelines. The other group included statements regarding various educational conditions such as study motivation, well-being and study habits. The students were asked to adopt a position on each of the 93 statements by selecting one of five possible response options: completely disagree, disagree, neither nor, agree and completely agree. Nine of these statements highlighted various forms of postponement behaviour; for example, “I prepare for lectures at the last minute”, or “I often postpone reading the curriculum literature”.

With a starting point in the factor analysis, we investigated whether dimensionality existed in the data material. As an extension of this analysis, a sum variable for “Postponement Behaviour” was developed. That variable was composed of four statements and demonstrated good reliability as measured by Cronbach’s Alpha (0.81).

3 RESULTS

Initially, descriptive analyses were conducted on all statements dealing with the various forms of postponement behaviour. To facilitate the legibility of the tables, the response categories of “completely disagree/disagree” were merged, as were the “agree/completely agree” classifications; cf. Table 1 below.

### Table 1. Percentage distribution of statements relating to postponement behaviour

<table>
<thead>
<tr>
<th>Statement</th>
<th>Completely disagree/Disagree</th>
<th>Neither nor</th>
<th>Agree/Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prepare for lectures at the last minute.</td>
<td>30.2</td>
<td>36.4</td>
<td>33.3</td>
</tr>
<tr>
<td>I often postpone study work until the last minute, even though I know I must do it.</td>
<td>43.8</td>
<td>23.6</td>
<td>32.6</td>
</tr>
<tr>
<td>I often postpone doing the written work.</td>
<td>56.6</td>
<td>17.4</td>
<td>26.0</td>
</tr>
<tr>
<td>I often feel guilty when I postpone study work.</td>
<td>21.7</td>
<td>28.7</td>
<td>49.6</td>
</tr>
<tr>
<td>I become stressed when I have not done the tasks that I know I should do.</td>
<td>13.2</td>
<td>16.7</td>
<td>70.2</td>
</tr>
<tr>
<td>I like to postpone study work.</td>
<td>77.9</td>
<td>16.3</td>
<td>5.8</td>
</tr>
<tr>
<td>I perform better when I work under pressure.</td>
<td>22.1</td>
<td>26.0</td>
<td>51.9</td>
</tr>
<tr>
<td>I read curriculum literature regularly.</td>
<td>38.0</td>
<td>32.9</td>
<td>29.1</td>
</tr>
<tr>
<td>I often postpone reading curriculum literature.</td>
<td>22.5</td>
<td>28.7</td>
<td>48.8</td>
</tr>
</tbody>
</table>

Roughly three out of ten students (33%) admitted to preparing for lectures at the “last minute”, and as many (33%) agreed that they often postpone completing schoolwork until the final moment, even though they know they must complete the work. It is not surprising to find that almost the same number (26%) claimed to delay completing their written work assignments.

It is perhaps more alarming to discover that roughly half of the students stated that they feel guilty when they postpone study work that they know they must complete, and that seven out of ten (70%) participants reported that they become stressed when they fail to complete tasks that they know they must finish. As shown in the table above, less than 6% of students claimed to enjoy postponing their study work.
It is worth noting that approximately half (52%) of the students stated that they perform better when they work under time constraints. At the same time, however, it is apparent from Table 1 that half of the students (49%) often postpone reading curriculum literature, while only three out of ten (approximately 29%) students stated that they read curriculum literature regularly.

It is a sobering thought that only approximately two out of ten (23%) students disagreed that they postpone reading the curriculum materials. Postponement behaviour is, in many ways, a contradiction of appropriate learning and working routines and is therefore a good measure of whether or not students possess healthy learning habits.

In Table 2, we describe the mean and standard deviation of the “Postponement Behaviour” construct. Scoring values are a minimum of 4 and a maximum of 20, on average, for postponement behaviour.

**Table 2. Mean, standard deviation and Cronbach’s alpha for postponement behaviour**

<table>
<thead>
<tr>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.9</td>
<td>3.4</td>
<td>0.81</td>
</tr>
</tbody>
</table>

We sought to determine whether variations occurred with respect to this average after students were grouped together based on various background variables. Would the participants form a homogenous group, or would differences in postponement behaviour appear between the various groups? To this end, t-tests were carried out using various background variables to define the groups. There appeared to be no significant differences between groups, except for the background variable of gender. Indeed, there was a significant difference between male and female participants in the means of postponement behaviour; cf. Tables 3 and 4.

**Table 3. Postponement behaviour: mean and standard deviation by gender**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12.655</td>
<td>3.198</td>
</tr>
<tr>
<td>Female</td>
<td>11.281</td>
<td>3.379</td>
</tr>
</tbody>
</table>

**Table 4. T-test for postponement behaviour. Grouping variable = gender**

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.522</td>
<td>0.471</td>
<td>3.339</td>
<td>256.000</td>
<td>0.001</td>
<td>1.375</td>
<td>0.412</td>
<td>0.564 – 2.186</td>
</tr>
<tr>
<td></td>
<td>3.353</td>
<td>0.001</td>
<td>1.375</td>
<td>253.418</td>
<td>0.001</td>
<td>0.410</td>
<td>0.567</td>
<td>2.182</td>
</tr>
</tbody>
</table>

As is indicated by the previous tables, there is clearly a greater tendency towards postponement behaviour among male students than among female students. Intrigued by this finding, we next attempted to develop a clearer picture that provides additional information about postponement behaviour, particularly with regard to the male group (but also among female students).

Therefore, a series of cross-table analyses were completed. There proved to be slight variations between groups, except when we separated the men and women into sub-groups on the basis of education level. To this end, those with relatively lower levels of education (a bachelor’s degree) were separated from those with higher-level degrees (master’s degree/PhD); cf. Table 5.
Table 5. Cross-table postponement behaviour, distributed into groups based on gender and education level

<table>
<thead>
<tr>
<th></th>
<th>Postponement Behaviour</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Count</td>
<td>Mean</td>
</tr>
<tr>
<td>Bachelor’s or equivalent</td>
<td>12.94</td>
<td>88</td>
<td>11.39</td>
</tr>
<tr>
<td>Master’s or higher</td>
<td>12.08</td>
<td>39</td>
<td>11.15</td>
</tr>
<tr>
<td>Total</td>
<td>12.66</td>
<td>127</td>
<td>11.28</td>
</tr>
</tbody>
</table>

Results indicated that men with lower academic degrees struggled most with postponement behaviour. Women with lower-level degrees also exhibited a greater degree of postponement behaviour than did women with master’s degrees, but these differences were not as great as those found in the male groups.

3.1 Discussion of findings

Approximately three out of ten PPU students stated that they often postpone study work that they know they must complete. Although this is a relatively high proportion of students, it is worth noting that Rabin, Fogel and Nutter-Upham (2011) concluded that when it comes to students with higher education levels, between 30 and 60% struggle with postponement behaviour. This indicates that PPU students do not struggle with this type of behaviour to a greater extent than do other students.

Nevertheless, there is good reason to take this type of behaviour seriously, especially since half of the students stated that they experience stress and seven out of ten expressed that they feel guilty when they postpone work they know they must complete. Botnmark, Kvalnes and Svartdal (2014) studied Norwegian students and found that even moderate forms of postponement behaviour can be linked to reduced health and well-being, which does not create a strong foundation for learning. Additionally, weaker academic results can be a direct consequence of the frequent adoption of postponement behaviour.

When students establish a goal for the work they are to complete, they must also take into account how much time they think they will spend on this work. In this context, it is worth noting that Corno (2008:207) pointed out that regulating one’s time use, strategic methods and efforts are important elements of successful learning.

Our finding that male students struggle with postponement behaviour more often and to a greater extent than female students corresponds with the findings of Duckworth and Seligman (2006), who discovered that girls are more self-disciplined than boys. This is also supported by the work of Matthews, Ponitz and Morrison (2009), who found gender differences among day-care children in terms of self-regulation practices.

It is perhaps not overly surprising that male students with bachelor’s degrees struggle to a greater extent with postponement behaviour than do those with master’s degrees. First, students with master’s degrees have already completed a master’s thesis, which requires a certain degree of self-regulation. Second, there may be reason to believe that those with master’s degrees have more self-confidence than those with bachelor’s degrees, which can affect a student’s motivation to take on work tasks.

4 CONCLUSIONS

Jackson, Weiss, Lundquist and Hooper (2003) concluded that there is a negative correlation between the use of postponement behaviour and study achievement; notably, this finding is supported by the work of Balkis et al. (2013).

As we have previously mentioned, Botnmark, Kvalnes and Svartdal (2014) concluded that even moderate forms of postponement behaviour can be linked to reduced health and well-being, as the adoption of postponement behaviour leads to increased stress relating to everyday study practices.
This corresponds with our findings, which show that half of students experience stress and that seven out of ten feel guilty when they postpone study work that they know they must complete.

Often, students are granted a decent amount of time to complete written tasks. When we see that half of the students reported that they perform better under time pressure, this indicates that we may need to alter this practice and assign shorter deadlines. This may correlate with the work of Ellis and Knaus (1977), who argued that there is a high prevalence among American students regarding the use of postponement behaviour when lengthy submission deadlines are established.

Nordy, Wang, Dahl and Svartdal (2016) conducted an examination of psychology students who had completed their first year of study at the Arctic University of Norway in Tromsø. Participating students attended four lectures where procrastination (postponement behaviour) was the theme; the purpose of these lectures was to teach the students appropriate strategies to avoid or reduce this type of behaviour. They concluded that the students benefited from the program, particularly those who struggled most with this type of behaviour.

Ferrari (2001), Harriott and Ferrari (1996) and Jackson et al. (2003) all found that students who adopt postponement behaviour tend to spend less time studying than those who do not. Study and work habits, however, are not mentioned in the framework plan for the PPU study program. This can possibly be explained by the fact that PPU students have several years of study behind them; therefore, perhaps it is taken for granted that such students have developed healthy work habits.

However, the findings of this study suggest the opposite. As previously mentioned, Jackson, Weiss, Lundquist and Hooper (2003) demonstrated that there is a negative correlation between postponement behaviour and study achievement, which is further supported by the work of Balkis et al. (2013). If the goal of high academic quality in PPU study programs is to be achieved, this discovery should be taken seriously.

Poor work routines not only lead to stress and guilt, but also to reduced learning ability. When we see that postponement behaviour can be reduced in first-year psychology students, there is reason to believe that similar reduction efforts could be appropriate for PPU students as well.

Such efforts would not only serve to increase learning ability and to reduce levels of stress and guilt in PPU students, they would also allow these individuals to pass this knowledge on to their future students at the secondary school and higher education levels. The findings of this study suggest that boys, in particular, will be able to benefit from such knowledge.

REFERENCES


