



Facultat de Psicologia, Ciències
de l'Educació i de l'Esport **Blanquerna**

Universitat Ramon Llull

TESI DOCTORAL

Concepcions sobre l'escriptura i benestar psicològic en els
estudis de doctorat: la perspectiva dels estudiants

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Concepcions sobre l'escriptura i benestar psicològic en els estudis de
doctorat: la perspectiva dels estudiants

[Writing conceptions and psychological well-being in Ph.D. studies:
students' perspectives]

Amb el suport de l'Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR) de la secretaria d'Universitats i Recerca (SUR) del Departament d'economia i coneixement (ECO) de la Generalitat de Catalunya

Resum

Concepcions sobre l'escriptura i benestar psicològic en els estudis de doctorat: la perspectiva dels estudiants

En el present treball es pretén analitzar i explicar la relació entre concepcions sobre escriptura científica i benestar psicològic al tercer cicle d'universitat, tant a partir d'un estudi comparatiu en el que s'analitzen els patrons obtinguts en dues mostres (631 doctorands espanyols i 939 doctorands finlandesos), com a partir d'un estudi de perfils d'escriptors centrat en els 631 espanyols. Prèviament, es tradueix i s'adapta *The Writing Process Questionnaire* (Lonka et al., 2014) en la població espanyola –instrument que, juntament amb una escala del MED-NORD questionnaire (Lonka et al., 2008) adaptada al context del doctorat en el treball de Pyhältö et al. (2009), són els que es fan servir per a la recollida de dades. Tant l'anàlisi correlacional de factors en l'estudi comparatiu com l'anàlisi de perfils dels doctorands espanyols desvetllen la interrelació entre escriptura i benestar. D'altra banda, els resultats confirmen l'ús del *The Writing Process Questionnaire* com una eina fiable per aplicar en població espanyola.

Paraules clau: concepcions sobre escriptura, benestar, doctorands, qüestionari, fiabilitat, estructura factorial.

Resumen

Concepciones sobre la escritura y bienestar psicológico en los estudios de doctorado: la perspectiva de los estudiantes

En el presente trabajo se pretende analizar y explicar la relación entre concepciones sobre escritura científica y bienestar psicológico en el tercer ciclo de universidad, tanto a partir de un estudio comparativo en el que se analizan los patrones obtenidos en dos muestras (631 doctorandos españoles y 939 doctorandos finlandeses), como a partir de un estudio de perfiles de escritores centrado en los 631 españoles. Previamente, se traduce y adapta *The Writing Process Questionnaire* (Lonka et al., 2014) en la población española –instrumento que, junto con una escala del MED NORD questionnaire (Lonka et al., 2008) adaptada al contexto del doctorado en Pyhältö et al. (2009), son los que se hacen servir para la recogida de datos. Tanto el análisis correlacional de factores en el estudio comparativo como el análisis de perfiles de los doctorandos españoles desvelan la interrelación entre escritura y bienestar. Por otro lado, los resultados confirman el uso del *The Writing Process Questionnaire* con una herramienta fiable para aplicar en población española.

Palabras clave: concepciones sobre escritura, bienestar, doctorandos, cuestionario, fiabilidad, estructura factorial.

Abstract

Writing conceptions and psychological well-being in Ph.D. studies: students' perspectives

The present study aims to analyze and explain the relationship between scientific writing conceptions and psychological well-being in the third cycle of university. It includes a comparative study in which we analyze the patterns obtained in two samples (631 PhD Spanish and 939 Finnish doctoral students), and a study about writers' profiles (focused on the 631 Spanish students). The tools used for the data collection are *The Writing Process Questionnaire* (Lonka et al., 2014), which is translated and adapted to the Spanish population, and one scales of the MED NORD questionnaire (Lonka et al., 2008) –adapted to the PhD context in Pyhältö et al. (2009). The correlational analysis of factors in the cross-cultural study and the analysis of profiles of the Spanish PhD students reveal a relationship between writing and well-being. Furthermore, the results sustain the use of *The Writing Process Questionnaire* as a reliable tool for the Spanish population.

Keywords: writing conceptions, well-being, PhD students, questionnaire, reliability, factorial structure

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Appendix 1. The PhD student survey

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Appendix 3. The PhD student survey (CATALAN VERSION)

1.INTRODUCCIÓ (CATALAN VERSION)

1.1. Estructura de la tesi

El treball de realització de la tesi es considera la primera recerca important de la que el candidat¹ a doctor se'n responsabilitza. A vegades no es té en compte o, si més no, no es para prou atenció, que per a molts estudiants de doctorat és també la primera vegada que han de fer front -alguns amb més entusiasme que d'altres- a una tasca d'aprenentatge autoregulat tan complexa com és l'escriptura de la tesi (Sachs, 2002). Però què en pensen els seus protagonistes?

Entre els mesos de febrer i juny de 2011 es van recollir les concepcions sobre l'escriptura científica, el context acadèmic i el nivell de benestar psicològic de 631 estudiants de doctorat d'arreu de l'estat espanyol a partir del *The Writing Process Questionnaire* (Lonka et al., 2014) i de dues escales del MED NORD questionnaire (Lonka et al., 2008) adaptades al context del doctorat en el treball de Pyhältö, Stubb and Lonka (2009). En el seu conjunt, aquests materials conformen *The PhD experience questionnaire* -un qüestionari que en la seva versió original es va enviar a doctorands finlandesos com a part d'un projecte de recerca nacional sobre l'educació doctoral a Finlàndia (2006-2008) i que hem adaptat al context espanyol.

Tres mesos després del nostre treball de camp, l'estructura factorial d'aquestes tres escales (escriptura científica, context acadèmic i benestar psicològic) es va presentar en un congrés d'àmbit internacional -*The 14th Biennial EARLI Conference for Research on Learning and Instruction*-, a Exeter (Regne Unit), juntament amb una anàlisi factorial de segon ordre. D'aquesta anàlisi es despenia que l'objecte d'estudi del qüestionari en el seu conjunt -l'experiència del doctorand- podia explicar-se a partir de dos factors: un primer macrofactor que aglutinava els factors de benestar i context acadèmic i un segon macrofactor que aglutinava els factors d'escriptura. El fet que els dos primers factors s'haguessin agrupat podia justificar-se ja que el grau de *satisfacció* del doctorand envers el seu context acadèmic repercuteix directament en el seu nivell de *benestar* -aspecte que no només havia quedat palès a nivell empíric en la nostra estructural factorial, sinó també a nivell de constructes si considerem, per exemple, que el Gran Diccionari de la Llengua Catalana defineix *Benestar* com 1. Situació en la qual hom troba *satisfetes* les

¹ Farem servir el tractament masculí com a genèric per tal d'evitar l'ús sistemàtic de la forma masculina i femenina que faria el text més carregós, evitant així també problemes de concordança.

necessitats de la vida, benança; 2. Estat de qui se sent bé, en què els sentits estan *satisfets*.

A partir d'aquesta anàlisi ens vam plantejar quina possible relació podia establir-se entre els dos macrofactors, de manera que es va dur a terme un anàlisi correlacional a nivell de factors que va desvetllar diverses relacions significatives entre el benestar/ la satisfacció i l'escriptura. En el present treball hem aprofundit en l'anàlisi d'aquestes relacions acotant-la a les variables de benestar pròpiament dites i, per tant, hem explorat les relacions entre el nivell d'*Estrès*, *Esgotament*, *Ansietat* i *Manca d'interès* del doctorand i les seves concepcions sobre l'escriptura a partir d'aquests sis constructes: *Bloquejos*, *Postergació*, *Perfeccionisme*, *Habilitat innata*, *Transformació del coneixement* i *Productivitat*.

Pensem que desenvolupar un treball com aquest en l'àmbit de la psicologia de l'educació és pertinent per diferents motius. En primer lloc, perquè l'estudi de les concepcions –en el nostre cas sobre l'escriptura– pot aportar informació rellevant envers el nivell de maduresa dels coneixements que disposen els nostres alumnes: analitzar les seves representacions ens pot ser de gran utilitat per conèixer les seves aproximacions a l'escriptura de la tesi i incidir-hi si fos precís. En la nostra tesi no entrarem en el debat respecte la validesa de les mesures d'autoinforme *versus* les conductuals o biològiques (veure Haefel i Howard, 2010). Entenem les concepcions sobre escriptura com a dades que ens aporten informació diferent a les que recolliríem si observéssim les accions dels nostres participants quan escriuen. En segon lloc, per reivindicar l'interès de l'estudi del benestar psicològic dels alumnes considerant la poca atenció que tradicionalment han rebut. Finalment, per augmentar el nostre coneixement respecte com les nostres emocions *modulen* tant els aprenentatges com les representacions que hi estan associades. Aquest és un aspecte clau de la recerca actual, atès que tradicionalment els estudis que contempen els aspectes emocionals no només han rebut poca atenció dins del nostre àmbit, sinó que quan ho han fet han considerat les emocions com a entitats diferenciades de la resta de funcions cognitives (veure per exemple Meyer i Turner, 2002) sense tenir en compte que precisament la nostra comprensió del funcionament psíquic queda seriosament limitada si no es consideren les emocions tal i com apunten estudis recents en àmbits diversos com, per exemple, en neurologia.

1.1. Estructura de la tesi

La tesi que a continuació es presenta compleix els requisits per obtenir la menció de tesi internacional i es compon de tres estudis empírics sustentats per una revisió teòrica que va des de l'anàlisi d'estudis que se centren en l'experiència de cursar el doctorat fins els estudis específicament centrats en les concepcions sobre l'escriptura i el benestar dels doctorands. La llengua de redacció de la tesi és l'anglès, tot i que tant el present apartat com les conclusions es desenvolupen en català i en anglès. De forma més detallada, aquest treball de tesi es divideix en aquests cinc apartats: marc teòric, mètode –que inclou els objectius de la recerca-, resultats, discussió i conclusions (annexos apart).

Pel que fa al marc teòric, s'obre amb un primer apartat en el que es contextualitza la recerca centrada en els estudis de doctorat a l'estat espanyol, destacant la manca d'estudis que recullin la perspectiva dels doctorands com un indicador més d'avaluació de la qualitat del doctorat. Dit això, es fa una revisió dels qüestionaris existents que s'han utilitzat per mesurar l'experiència del doctorand. La revisió s'ha organitzat geogràficament i finalitza amb els treballs que s'han dut a terme a Europa, de manera que tanquem aquesta secció introduint *The PhD experience questionnaire*, posant de relleu la necessitat de disposar d'una eina en castellà que mesuri l'experiència dels que cursen estudis de doctorat no existent fins el moment.

Un cop fet això, s'obre una nova secció teòrica en la que de manera específica es revisa la recerca desenvolupada al voltant de les concepcions sobre l'escriptura i el benestar al tercer cicle d'educació superior. Es destaquen algunes iniciatives que posen de manifest la importància de l'ensenyament de les competències de la comunicació escrita a la universitat (incloent algunes accions dutes a terme a nivell de doctorat) i la necessitat de fer emergir tant les concepcions que té l'alumnat entorn l'escriptura com el benestar associat a aquestes concepcions. Es tanca aquest segon cos teòric destacant la necessitat d'estudis que interrelacionin concepcions entorn l'escriptura i benestar.

Seguidament, en el tercer capítol es presenten els objectius del nostre treball de tesi: el primer d'ells – la traducció i adaptació del *The Writing Process Questionnaire* (Lonka et al., 2014)- per donar resposta al primer estudi empíric que hem designat com a *estudi 1* i

el segon –explicar la relació entre concepcions sobre escriptura i benestar psicològic- als altres dos estudis empírics que hem designat com a *estudi 2* i *estudi 3*.

En el capítol relatiu al mètode es caracteritzen les dues mostres que hem analitzat- l'espanyola i la finlandesa- i s'explica com estan organitzats els estudis de doctorat en ambdós contextos. Seguidament es descriu l'instrument utilitzat aportant una breu pinzellada dels estudis previs relacionats amb cadascun dels factors d'escriptura i benestar mesurats. Pel que fa al procediment, s'explica tant el procés de traducció i adaptació de l'escala d'escriptura, com el procés de recollida de dades d'ambdues mostres. Es tanca l'apartat del mètode exposant els tipus d'anàlisi que s'utilitzaran en cadascun dels tres treballs empírics.

El capítol de resultats s'organitza en tres parts, una per a cada estudi, i en el capítol de discussió es comenten i contrasten amb treballs anteriors els resultats dels tres estudis desenvolupats. En aquest mateix capítol s'inclou la discussió del treball de revisió d'instruments que recullen la veu dels doctorands. Per acabar, el treball es tanca amb unes conclusions generals.

1. INTRODUCTION (ENGLISH VERSION)

1.1. Structure of the dissertation

Thesis work is the first important research where the PhD candidate² gets responsible. Sometimes it is forgotten, or at least not enough attention is paid, that for a lot of PhD students it is also the first time they have to face a complex self-regulated learning task (Sachs, 2002). Some do this with more enthusiasm than others. But what do the protagonists think about it?

We collected the views on scientific writing, the academic context and the psychological well-being of 631 doctoral students from all over Spain between February and June 2011. We used *The Writing Process Questionnaire* (Lonka et al., 2014) and two scales from the MED NORD questionnaire (Lonka et al., 2008) adapted to the PhD context in Pyhältö, Stubb and Lonka (2009). These materials form *The PhD experience questionnaire*. In its original version it was sent to Finnish doctoral students as part of a national research project on doctoral education in Finland (2006-2008). We adapted it to the Spanish context.

Three months after our fieldwork, the factorial structure of these three scales (scientific writing, academic context, and psychological well-being) was presented at an international conference –*The 14th Biennial EARLI Conference for Research on Learning and Instruction*–, in Exeter (UK), along with a second-order factor analysis. From this analysis, it appeared that the object of study of the questionnaire as a whole – the experience of the candidate- could be explained from two factors: (1) a macrofactor, which united well-being and academic context factors, and (2) a macrofactor that brought together the writing factors. The fact that well-being and the academic context were joined together could be justified because the degree of *satisfaction* of the doctoral candidate towards his academic context directly affects his level of *well-being*. This was not only evident in our factorial structure empirically, but also from an analysis of constructs. For example, the *Gran Diccionari de la Llengua Catalana* [Great Dictionary of the Catalan Language] defines *well-being* as (1) a situation in which one meets the needs of life, is *satisfied* – bliss; (2) a state of someone who feels good, where senses are *satisfied*.

² We will use the masculine as generic treatment to avoid the systematic use of male and female form that would make the text more nuisance.

From this analysis we tried to establish a possible relationship between the two macrofactors. We conducted a correlation analysis of factors that revealed several significant relationships between well-being/satisfaction and writing. In the present work we extend the analysis of these relationships, limiting it to the well-being variables –strictly speaking. This means, we explored the relationship between levels of *Stress, Exhaustion, Anxiety* and *Lack of interest* of the PhD students and their writing conceptions from these six constructs: *Blocks, Procrastination, Perfectionism, Innate ability, Knowledge transformation* and *Productivity*.

Developing such a work in the field of Educational Psychology is relevant for three reasons. Firstly, the study of conceptions -in our case on writing- can provide important information towards the maturity level of our students' knowledge. Analysing their representations can be useful to know their approaches to thesis writing and to intervene if necessary. In our thesis we will not extend the debate regarding validity of self-report measures with respect to behavioural or biological measures (for an overview see Haeffel & Howard, 2010). By collecting writing conceptions we gain a different understanding than observing actions of writing. Secondly, it is important to reclaim the interest in studying the psychological well-being of students, considering the little attention it has received traditionally. Finally, we need to improve our knowledge about how our emotions *modulate* both our learning and associated representations. This is a key aspect of current research, not only because studies considering emotional aspects have traditionally received little attention in our area, but also because when they have been considered, emotions have been regarded as separated entities from other cognitive functions (see e.g. Meyer & Turner, 2002). These studies do not take into account that our understanding of psychic functioning is indeed severely limited if emotions are not considered, as recent studies, in e.g. Neurology, point out.

1.1. Structure of the dissertation

The thesis presented below meets the requirements for an International Doctorate and consists of three empirical studies, supported by a theoretical review of studies that focus on the experience of taking a PhD, to studies on writing conceptions and well-being of doctoral students. The thesis is written in English. Additionally, this section

and the conclusion are provided in both Catalan and English. The work is divided into five parts: theoretical framework, method –including aims of the research-, results, discussion, and conclusion (appendices are separate).

Regarding the theoretical framework, it begins with a first section in which the research on doctoral studies in Spain is contextualized, highlighting the lack of studies that collect the perspective of doctoral candidates as one more evaluation indicator of the quality of the PhD. A review on existing questionnaires used to measure the candidate's experience is conducted. The review is organized geographically and ends with the work carried out in Europe. This section closes by introducing *The PhD experience questionnaire* and highlighting the need for a tool in Spanish that measures the experience of the students pursuing doctoral studies, which is non-existent so far.

The second section is opened by reviewing, in particular, the research conducted around writing conceptions and well-being in the third cycle of higher education. Some initiatives are highlighted, underlying the importance of teaching written communication competencies at university (including some actions taken at PhD level), and the need to make explicit both the conceptions that students have around writing and the well-being associated to these conceptions. This part finishes by emphasizing the need for studies interrelating writing conceptions and well-being.

The aims of the research are presented in the third chapter. The first aim –to translate and adapt *The Writing Process Questionnaire* (Lonka et al. 2014)- corresponds with the first empirical study that we have named *study 1* and the second –to explain the relationship between writing conceptions and psychological well-being- corresponds with the other two empirical studies named *study 2* and *study 3*.

The method chapter characterizes the two samples that we have analyzed -the Spanish and the Finnish-, and explains how doctoral studies are organized in both contexts. It describes the instrument used and provides a picture of previous research related to each of the writing and well-being factors measured. Regarding the procedure, it explains both the process of translation and adaptation of the writing scale, as well as the process

of collecting data for both samples. The fourth section closes by showing the type of analysis used in each of the three empirical studies.

The results chapter is organized into three parts, one for each study. In the discussion chapter these results are discussed and contrasted with previous research. This chapter includes the discussion of the review of instruments that collect the perspectives of PhD students. Finally, the most relevant conclusions from the study are explained.

2.THEORETICAL FRAMEWORK

2.1. Students' perspectives as an indicator to assess the quality of PhD: Overview of studies that measure the doctoral experience

2.2. Writing conceptions and psychological well-being in the third-cycle education

2.1. Students' perspectives as an indicator to assess the quality of PhD: Overview of studies that measure the doctoral experience

Doctoral studies are highly relevant in the context of higher education not only because they constitute the highest degree of university education (Koerner & Mahoney, 2005; Buela-Casal, 2005; Bermúdez, Castro, Sierra, & Buela-Casal, 2009), but also for research carried out in a particular university (Mestre & Pérez-Delgado, 1991; Kamler, 2008) and country, even though such research activity is not always visible or recognized as such (Pelechano, 2002; Enders, 2005). In Spain, doctoral students represent 4.2% out of university students (data calculated from the INE- *Instituto Nacional de Estadística* [National Statistics Institute], 2012), and although the data does not indicate a significant increase of students enrolled in postgraduate studies in the past 10 years, it is possible to see a clear growth of approved theses at least from the academic year 2006-2007 (INE, 2012), coinciding with the appearance of the RD [Royal Decree] 1393/2007. Given the relevance of doctoral studies, assessment on the quality of such studies becomes a necessary task executed at different levels.

Assessment of the quality of PhD studies in Spain

The *Ministerio de Educación, Cultura y Deporte* [Ministry of Education, Culture and Sports] has generated various initiatives in recent years. These include the program *Mención* [Mention program] (linked to the Agencia Nacional de Evaluación de la Calidad y Acreditación ANECA [National Agency for Quality Assessment and Accreditation]), the program *Estudios y Análisis* [Studies and Analysis] and the preparation of statistical reports from the INE and other agencies.

Additionally, the governments of different regions of Spain (called “comunidades autónomas”) or the universities themselves have developed various initiatives to evaluate proposals for doctoral programs and/or making a follow-up of them checking, if necessary, their correct implementation and/or results. Therefore, research on the evaluation of the quality of higher education -and in particular the assessment of the quality of doctoral studies- has grown exponentially in the Spanish context, especially since the Bologna Declaration (1999) (Buela & Castro, 2008). Studies have focused

alternately on: a) analyzing reforms of doctoral studies and programs with the aim of proposing lines of improvement (Rodríguez, 2003); b) studying the evolution of the evaluation criteria of the program *Mención* (Buela-Casal & Castro, 2008); and c) developing comparative studies about doctoral programs both generally (Bermúdez et al., 2009) and within a specific area (Cano-Fernández, Lidon-Lopez, & Rebollar-Rubio, 2011).

Most of these studies have focused on assessing the level of scientific productivity as an indirect variable that helps to assess the quality of doctoral studies. Scientific productivity level is inferred, in some cases, from the number of theses supervised (Moyano, Dominguez, & Buela-Casal, 2006; Musi-Lechuga, Olivas-Ávila, & Vázquez, 2011), the number of theses defended -from any discipline (Fuentes-Pujol & Arguimbau-Vivo, 2010) or within a specific discipline (Agudelo, Breton-Lopez, Ortiz-Recio et al., 2003; Xifra & Castillo, 2006; Torralbo, Fernández-Cano, Rico, Maz, & Gutiérrez, 2003; Vallejo-Ruiz, Fernández-Cano, Torralbo, Maz & Rico, 2008; Mestre & Pérez-Delgado, 1991; Civera & Tortosa, 2001)-, while others relate such scientific productivity with the regulations governing doctoral studies (Buela-Casal, Bermúdez, Sierra, Ramiro, & Castro, 2011) and the funding that doctoral programs received (Musi-Lechuga, Olivas-Ávila, Guillén-Riquelme, & Castro, 2011). Some of these studies relate productivity to some characteristics of doctoral students, e.g. having a scholarship (Buela-Casal, Guillén-Riquelme, Bermúdez, & Sierra, 2011; Guillén-Riquelme, Guglielmi, Ramiro, Castro & Buela-Casal, 2010), based on their area of knowledge (Buela-Casal, Guillén-Riquelme, Guglielmi, Quevedo-Blasco, & Ramiro, 2011), or even by dealing with gender differences (Villarroya, Barrios, Borrego, & Frias, 2008; Bermúdez et al., 2011). Finally, some assess the productivity and quality of doctoral studies based on the number and type of indexed publications (Musi-Lechuga, Olivas-Avila, & Castro, 2011) or a combination of theses supervised and indexed publications (Musi-Lechuga, Olivas-Avila, & Buela-Casal, 2009).

The importance to collect the PhD students' perspective as an indicator to measure the quality of doctoral studies

Despite the relevance and usefulness of all these initiatives, in Spain there is a lack of studies that aim for analyzing the perspective of doctoral students as an alternative methodological tool for research in the field of doctorate. In fact, we found only two studies of this nature: On a large-scale, Jacobsson and Gillström (2006) compare the doctoral experience in different countries with the collaboration of the AQU (*Agència per a la Qualitat del Sistema Universitari de Catalunya* [Agency for the Quality of the University System in Catalonia]) to collect a portion of the sample in Catalonia. On a small-scale, Coromina, Capo, Guia and Coenders (2011) collect the perceptions of doctoral students and their supervisors from a questionnaire and interviews in order to investigate which aspects predict their scientific production.

The most widespread practice to collect the voices of doctoral candidates are the well-known questionnaires of opinion and assessment on various aspects of the training received. Most universities provide these questionnaires to their students after finishing their education credits with the final aim of improving some aspects of doctoral courses teaching and curriculum structure of the institution in question. In this context, it seems not only important but also necessary to develop situated research tools to empirically analyze the experience of the candidate as an element that could help to improve some aspects of doctoral programs, not only based on productivity, equity and efficiency quantitative data, but also considering the protagonist him/herself as an agent of change and as informant of the process.

Research on doctoral students' experience

The international research scene is quite different, and research focused on PhD students' perspectives has increased especially in the last twenty years. The focus of this review lies on studies measuring doctoral experience from questionnaires and scales, either exclusively or as complements to other instruments of data collection. Therefore, studies in which data is collected from other tools (mostly interviews and discussion groups) have been discarded.

A comprehensive review of the literature was conducted using *PsychInfo* and *Education Resources Information Center (ERIC)* databases. The search was carried out using a combination of the following search terms: “PhD”, “doctor*”, and “graduate*” on the one hand, and “questionnaire”, “survey” and “scale” on the other, resulting in a total of nine combinations for each database. The search was not limited to publication dates, as it was not the authors’ intention to attend a specific period. Articles were selected by using those that included an evaluation of PhD studies from the students’ perspective in the title or abstract, excluding the ones evaluated from other agents’ perspectives. The full article was reviewed in ambiguous cases. The initial electronic search resulted in 944 potential articles from which a total of 73 were selected. Additionally, a manual search was conducted using the references from the selected articles, to find other articles missed in the electronic search. Furthermore, Google Web Search was used, as some large scale studies conducted by governments and universities were published as reports and not as journal articles.

For this review, the selected studies were classified by geographical area. For each area, we first specified the ones applied on a large-scale and then -most frequently- the ones applied on a small-scale. In both cases they were classified according to whether the data was collected while the PhD candidate was conducting his studies (understanding the experience as a current process), once completed from the position of graduate doctors (evoking the already lived experience in retrospect) or, in few cases, from the position of those leaving the PhD (in this case understanding the experience as an unsurpassed process). In some cases we also found mixed sample studies (e.g. PhD students combined with their supervisors or with recent graduates). In any case, two sub-working groups are distinguished: on the one hand, studies examining the general experience of the candidate (program, preparedness level and aspirations) linked to their level of satisfaction and, on the other hand, those that deal with specific aspects of his experience, which can be very numerous and sometimes complementary.

Studies examining the general experience of the candidate are usually applied on a large-scale. Some of these large scale studies, however, focus on specific aspects of the candidate’s experience. In both cases, they seek for generalizations or comparisons of commonalities and, in general, as their authors argue, could contribute to a more general

assessment of policies, practices and PhD programs to reflect, from certain signs of success and failure, what works and what does not in doctoral education, so it is considered that the information provided may be useful for designing programs and decision making. Notably, none of the reviewed studies implemented on a large-scale are qualitative (except for two with a mixed approach, combining Likert items and open-ended questions), or longitudinal, probably because of the economic and laboriousness cost that implies conducting studies of this nature on a large-scale.

A. Studies in USA and Canada

In the USA and Canada, several initiatives in the last two decades have been concerned with evaluating the experience of doctoral candidates as a measure of the quality of doctoral studies (Barnes & Randall, 2011; Golde & Dore, 2004). Particularly meaningful are the following two: a) *The Survey on Doctoral Education and Career Preparation* (Golde & Dore, 2001) involving 1.740 PhD students from 27 doctoral universities from an USA interagency program; and b) the questionnaire *Three Magic Letters* (Nettles & Millett, 2006) applied to 9.038 doctoral candidates from 21 universities in the USA or, focusing on specific aspects of the PhD experience, the national online survey from Zimak, Edwards, Johnson and Suhr (2011) applied to a sample of 1.034 doctoral students from 169 American and Canadian institutions, investigating the reasons leading candidates to initiate PhD studies.

The studies that evaluate the doctoral experience retrospectively include also three different instruments: a) the national survey *Social Science PhDs -Five + Years Out* (SS5) (Morrison, Rudd, Zumeta, & Nerad, 2011) applied to 2.192 recent doctorates from 65 institutions in the USA; b) the *Survey of Earned doctorates (SED)* (NSF/NIH/USED/USDA/NEH/ NASA, 2012) that the *National Opinion Research Center* in Chicago passes annually to recent American doctorates; and c) the study *In Pursuit of the PhD* of Bowen and Rudenstine (1992), conducted with more than 35.000 participants who completed doctoral studies between 1962 and 1986 in ten American universities.

Some studies, combining in their sample both doctoral students and doctors, are a) the *Survey of the Quality of Nursing Doctoral Education (QNDE)* (Kim, Park, Park, Khan, & Ketefian, 2014) including a total of 297 PhD students and 164 graduates, 29 deans and 179 teachers from 72 nursing schools; b) the *National Doctoral Program Survey (NDPS)* (Barnes & Randall, 2011) in which data was collected from 23.009 participants from seven disciplines/departments in the USA and Canada; and c) the one of Anderson (1996) which included data from 2.400 PhD students and professors in 98 American universities, exploring in particular some issues of the learning context of the candidate.

In the case of small-scale studies, questionnaires have been used to evaluate a specific PhD program (Biegel, Hokenstad, Singer, & Quo, 2006) or to assess the experience of some specific group of students, using ethnicity as a variable (Nettles, 1990), international students (Sato & Hodge, 2009) or female PhD students (Holahan, 1979; Mansfield, Welton, Lee, & Young, 2010). Exploring specific aspects of the PhD experience, some studies focused on the needs, expectations and aspirations of the candidates (Miller & Lambert-Shute, 2009; Ewen, Watkins, & Bowles, 2006), their perception of the academic context (Webb, Njoku, & Allen, 1996; Weidman & Stein, 2003), their perception of the supervisor (Inman, Schlosser, Ladany, Howard, & Boyd, 2011; Rose, 2003; Lunsford, 2012; Bell-Ellison & Dedrick, 2008), or around academic writing either from the evaluation of specific courses (Caffarella & Barnett, 2000; Surratt, 2006) as well as on the feedback they receive (Can & Walker, 2011).

Some of them are part of longitudinal studies aimed at analyzing the identity of the candidate (Jazvac-Martek, 2009; McAlpine & Amundsen, 2011; McAlpine, 2012) or to compare their experiences in terms of gender (Ülkü-Steiner, Kurtz-Costes, & Kinlaw, 2000 -the questionnaire developed here was used both in a cross-sectional study and episodically with part of the sample). These longitudinal studies have also developed questionnaires focused on specific aspects of the PhD like the characteristics and aspirations of the candidates (Ewen, Carr, & Reynolds, 2012) or their perception of the supervisor (Paglis, Green, & Bauer, 2006).

Continuing with small-scale studies, interest and questionnaires developed ranged from collecting the doctoral experience when participants are already doctors in a specific

discipline (Cheatham, Edwards, & Erickson, 1982), to multiple disciplines analyzing relevant variables on doctorate completion (Seagram, Gould & Pyke, 1998), and to analyzing discipline and gender (de Wolf & Washington, 1980). We also find some specific studies focused on the writing of the thesis (Cuetara & Lecapitaine, 1991) and on the supervision (Goulden, 1991) –the latter from the perspective of students and supervisors.

Among those mixed sample studies, combining both doctoral candidates and recent graduates, we found, first, the study of Fuhrmann, Halme, O'Sullivan and Lindstaedt (2011) focusing on doctorates career paths preferences (in this case the recent graduates were pursuing all postdoctoral studies); second, the studies of Wangmo, Ewen, Webb, Teaster & Russell Hatch (2009), and Webb, Wangmo, Ewen, Teaster & Hatch (2009) which analysed respectively a monitoring program (also completed by older people participating in one of the courses offered by a doctoral program on Gerontology), and satisfaction with the supervisor and peers (also completed by teaching staff); third, Kluever's study (1997) comparing doctoral students who are about to get their PhD and doctors experiences regarding their relationship with the university; forth, two studies that had developed questionnaires to find out factors contributing to the persistence (Ivankova & Stick, 2007) and drop out of PhD studies (Lovitts, 2001) -in both cases also with non completer PhD students; and fifth, the study of Helmers, Danoff, Steinert, Leyton and Young (1997) exploring students' stress level (also undergraduates).

B. Studies in Oceania

As for studies developed on a large-scale in the oceanic context, Pearson, Cumming, Evans, Macauley and Ryland (2011) developed *The national survey of doctoral candidates* in Australia with support from the *Council of Postgraduate Student Association* (CAPA) in which 5.395 PhD students from 38 institutions -both from university and business environment- participated. On a small-scale we find the questionnaire of Morton and Thornley (2001) which collected the problems that PhD students experience; the one of Harman (2002; 2003) that in the first study compared the experiences of doctoral students in two different contexts and in the second collected the experience of international PhD students and, finally and more

specifically, two questionnaires around collaborative writing experiences (Larcombe, McCosker, & O'Loughlin, 2007; Aitchison, 2009) and one addressed at both current doctoral and recent graduates in which their experiences on supervision are analyzed (Lee & McKenzie, 2011).

C. Studies in Asia

The QNDE survey, mentioned in the American context, was also applied in the Asian context. Firstly, with a Japanese population, in one study involving 127 students from 28 doctoral programs in nursing and another adding also 24 recent PhD graduates and 87 teachers (Miki, Gregg, Arimoto, Nagata & Murashima, 2012; Nagata et al., 2012). Secondly, in the Korean territory, in a study involving 87 PhD students from 14 nursing schools apart from seven deans, 48 teachers and 52 recent graduates (Kim et al., 2012). Thirdly, in Thailand in a study involving 199 subjects among deans, professors, recent graduates and current PhD students from 7 nursing faculty (Juntasopeepu, Kunaviktikul, Chintanawat, & Srisuphan, 2012). On a small-scale, we highlight the study of Sachs (2002) that dealt specifically with the attitude of the candidate facing the writing of the thesis.

D. Studies in Africa

Africa is the only context in which no large-scale studies have been found. On a small-scale, Geber and Bentley (2012) evaluate the intervention of a program to accelerate the completion of the PhD, passing questionnaires prior to and after the intervention.

E. Studies in Europe

In the European context we found ten studies on a large-scale. Looking at the PhD experience in a more global way, two studies aimed to make a cross-national comparison: on the one hand, the work of Jacobsson and Gillström (2006) in which PhD students from four different countries participated (7.068 Sweden, 3.826 Finnish, 1.001 Catalan and 1.454 Irish). On the other, the questionnaire by Chiang (2011) applied to a sample of 1.113 British PhD students from 59 departments and 345 French PhD

students from 49 departments. The next three studies on large-scale attended specific aspects of the PhD experience. Firstly, van Hout (1991) developed an open ended questionnaire aimed to investigate the problems experienced by 166 students from six Dutch universities over their PhD students career; secondly, Torrance, Thomas and Robinson (1992; 1994) investigated the writing experiences of 110 PhD students from 10 British universities; and thirdly, the questionnaire of Martinsuo and Turkulainen (2011) on how PhD students personal commitment and received help explain progress in their doctoral studies. It was passed to 109 doctoral students from the departments of Industrial engineering and Business management of the five universities in Finland.

Special mentioning deserves the questionnaire on doctoral education developed in Finland -which we have translated and adapted for the Spanish population conducted with 669 doctoral students from three faculties that has lead to several studies on specific aspects of PhD students' experiences: the challenges they face (Pyhältö, Toom, Stubb, & Lonka, 2012), their own thesis research (Stubb, Pyhältö, & Lonka, 2012), their learning community and their role within it (Stubb, Pyhältö, & Lonka, 2011; Pyhältö et al., 2009) and their academic writing conceptions associated with their psychological well-being (Lonka et al., 2014). These studies show how socio-psychological well-being and the level of commitment of the candidate are key for the perception of a satisfying experience.

On a small-scale, we highlight the studies on the obstacles and opportunities that PhD students experience (Appel & Dahlgren, 2003), their mock vivas (Hartley & Fox, 2004) or their interaction and role of the supervisor (Mainhard, van der Rijst, van Tartwijk, & Wubbels, 2009; Haksever & Manisali, 2000). In retrospect (former PhD students), and combining the sample with current PhD students, we find the questionnaire of Grevholm, Persson and Wall (2005) from which a model of doctoral education is evaluated; and, combining in the sample PhD students and supervisors, we find the questionnaire of Evans (2007) on the experience of international PhD students. Finally, other studies valuing specific aspects can be identified; the already mentioned study from Coromina et al. (2011), focusing on scientific production combining in the sample PhD students and supervisors, and the one of Rudd (1986), on the reasons that lead PhD students to abandon their studies, addressed therefore to non completers PhD students.

As the previous review has shown, studies collecting the PhD experience on a large-scale have not been carried out in our country, and have not provided any evaluative tools in this respect, except for the one of Jacobsson and Gillström (2006) applied in a cross-national study, but only with PhD students from a specific Spanish region, Catalonia. Consequently, we feel necessary to cover this gap in Spanish research on doctoral education, especially nowadays, when doctoral programs adapted to the EHEA guidelines are already operating. In this context, PhD students' perceptions on their doctoral experience can be a good assessment indicator for PhD programs, without letting this task solely in the hands of the ones who provide the service -professors, department heads, directors or coordinators of doctoral programs-, but also including the ones who receive it.

To this end, and since there is no tool in Spanish language to help us in this task, we have decided to translate and adapt to the Spanish PhD population the questionnaire from the national research project on doctoral education in Finland, available in its completed form in Pyhältö et al. (2012). This questionnaire was chosen because, apart from being recently updated and published, it provides an integrated tool, addressing several psychological variables related to well-being, writing conceptions and learning environment, which are key in the PhD experience and thus, relevant for our present work.

2.2. Writing conceptions and psychological well-being in the third-cycle education

The design and implementation of PhD studies are quite flexible in each country and university in comparison to other educational levels, although the creation of the *European Higher Education Area* (EHEA) in 2010 aimed at promoting convergence in European higher education systems. It is, however, commonly shared that to foster the diversity of interests among PhD students, at least some of the offered courses should be oriented towards general issues like methodology, epistemology, written and oral communication competences (Agudelo, Bretón-López, Poveda-Vera et al., 2003) or

ethics, which constitute a base for PhD preparation and can critically affect the quality of students' doctoral studies.

Academic writing instruction in Post-graduate and PhD education

Research initiatives, knowledge and publications on writing instruction have increased exponentially in Europe in the last 20 years (see for a revision Castelló & Donahue, 2012). This is quite clear in English speaking countries (Ivanič, 1998; Lea & Stierer, 2000; Lea & Street, 1998 or Lillis & Curry, 2010 among others), as well as in some North European countries (Dysthe, 2007; Gustafsson 2011; Björk & Räisänen, 1996). Nevertheless, it is much more difficult to find out what has been done in other European countries because of the diversity of national languages, journals and research traditions (Chitez & Kruse, 2012). Therefore, the dialogue and the discussion around shared problems and interests among European countries, especially those with different languages than English, have remained historically scarce and dispersed.

As for graduate and doctoral writing research, current studies have addressed the troubles and difficulties of writing thesis and dissertations from linguistic, social and educational perspectives (Carlino, 2012; Rinck & Boch, 2012; Maher et al. 2008; Castelló, Iñesta, & Corcelles, 2013; Caffarella & Barnett, 2000; Larcombe et al., 2007; Aitchison, 2009; Crossouard & Pryor, 2009; Koncel & Carney, 1992; Surratt, 2006; DeLyser, 2003). Despite some interesting initiatives (Björk & Bräuer, 2003; Ganobcsik-Williams, 2006; Lonka, 2003; Castelló, 2008; Castelló et al., 2013), interventions on academic writing in Ph.D. studies are still not generalized in European countries (Chitez & Kruse, 2012).

Those initiatives have focused on facilitating *regimen* -constant writing regardless of mood, time, and space (Boice, 1990)-, social support, peer feedback, awareness and development of the writer's identity and writing conceptions and have been positively evaluated by PhD students that specially recognize the benefits of giving and receiving writing feedback to understand the writing process and produce better texts.

It has been claimed that it is urgent to promote research on European PhD students'

writing (Chitez & Kruse, 2012; Castelló & Donahue, 2012; Carlino, 2012) considering a) non PhD student can skip the writing of the thesis -the basis on which his degree is awarded (Cotterall, 2011)-, b) writing is highly demanding at this level as students have to make their work relevant to the academic community, and c) even studies with undergraduates can give us some clues, graduates differ from undergraduate writers (Torrance et al., 1992).

Why writing conceptions matter?

Writing conceptions may play a crucial role in respect of PhD students' approach to their thesis writing, their explanations of success and failure, their commitment to developing their academic literacy skills and their actual practices and procedures for writing (Lonka, et al., 2014; Mateos & Solé, 2012). Moreover, research has demonstrated that writing conceptions are susceptible to change through writing instruction (Torrance et al., 1992, 1994; Caffarella & Barnett, 2000), and that this can improve writing instruction itself (Ylijoki, 2001; Kwan, 2010; Cotterall, 2011). Making PhD students aware of them might also be interesting since they come from diverse instructional backgrounds, and these conceptions are often socially shared (including maladaptive and biased ones), therefore affecting the nature of interaction in scholarly communities (Stubb et al., 2011).

Studies analyzing writing conceptions at graduate level, can be differentiated on the basis of their different focus. A first group of studies are concerned with writing beliefs (White & Bruning, 2005; Mateos & Sole, 2012) and writing attitudes (Sachs, 2002) that can be of value for supervisors in order to guide students successfully in their writing of a thesis. In a second group, studies measure students' conceptions as a variable to identify students' writing approaches (Torrance et al., 1994; Lavelle & Bushrow, 2007; Green, 2007; Castelló, Iñesta, & Monereo, 2009). A third group focuses on experiences with writing, highlighting the most common difficulties that students encounter in their writing processes (Hernandez, 1985; Bishop, 1993), their writing practices (Cotterall, 2011), a mix of both aspects (Torrance et al., 1992), or from the construction of self-authority (Baxter Magolda, 1998). Studies in the fourth group relate the thesis writing experience with the learning environment (Cuetara & Lecapitaine, 1991; Ylijoki, 2001),

the discipline (Delcambre & Dinahue, 2012) or with both aspects (Kamler, 2008). Studies that focus on writing interventions constitute the fifth group. They have been included in this review, because when graduates are asked to evaluate them, their opinions and impressions on the writing process are indirectly collected as well (Torrance, Thomas, & Robinson, 1993; Torrance & Thomas, 1994; Kwan, 2010; Koncel & Carney, 1992; Surratt, 2006; DeLyser, 2003). Most of these interventions are writing group experiences (Larcombe et al., 2007; Maher et al., 2008; Aitchison, 2009; Parker, 2009) and, in few cases, data is collected not only after the writing intervention but also before and during, therefore tracing developmental trends in students' perceptions (Caffarella & Barnett, 2000). In the last group, we have placed some studies in which graduates evaluate the feedback received of their writing. They are also included in this revision since they indirectly provide information on their writing conceptions (Can & Walker, 2011; Wang & Li, 2011; Caffarella & Barnett, 2000; Crossouard & Pryor, 2009; Eyres, Hatch, Turner, & West, 2001; Li & Seale, 2007; Kumar & Stracke, 2007; Hyland & Hyland, 2001).

Results of these studies show that writing conceptions may influence the final written product -its quality and productivity- and that they may be linked to the characteristics of the writers: their writing and revising strategies, their writing knowledge, partially their knowledge orientation, academic ability and beliefs in luck, their motivation and their level of experience. Studies focusing on this last aspect have highlighted that graduates show considerable immaturity, but in comparison to undergraduates, their writing experiences and habits are more similar to those of productive academics. In addition, they highlight the importance of writing conceptions in order to understand students' situated practices, which are always dependent on their learning context, and to improve writing instruction and supervision. This educational improvement should be addressed: a) within the context of increasing cultural diversity -especially in the supervisory feedback, b) within a discipline-specific learning and discourse community, c) as a collaborative experience, so that students have more opportunities to transform their writing conceptions being more able to conceive writing as a social activity, and d) considering the impact of writing in students' identity.

Why psychological well-being matters?

Linked to conceptions, psychological well-being when conducting academic tasks –and in particular writing tasks- should as well be explicitly addressed in instruction, as it may help teachers to better understand students’ attitudes and practices, and consequently help them in making students’ writing processes more pleasant and effective.

Studies on psychological well-being related to writing can be organized in four main groups. The first one addresses writing apprehension (Onwuegbuzie, 1998; Onwuegbuzie, 1999; Onwuegbuzie & Collins, 2001; Flett, Stainton, Hewitt, Sherry, & Lay, 2012). Outcomes from these studies show that writing with apprehension is related to students’ self-perception, their learning styles and also their level of procrastination. These results seem to point out that psychological approaches to writing have some influence on learning, writing processes, and writing conceptions. In respect to this last aspect of our concern here, only the study of Onwuegbuzie and Collins (2001) has explicitly made this connection, finding writing apprehension and procrastination were related when writing a term paper.

A second group of studies has analyzed some psychological well-being variables in order to draw a more complete picture of graduates’ writing experiences and strategies. In these cases, worry and stress have been measured (Torrance et al., 1992; 1994; Torrance & Thomas, 1994), as well as anxiety and confidence (Castelló, et al., 2009). Differences were found regarding levels of worry, anxiety and confidence, but not stress. A result of interest for us is that less self-awareness of one’s writing process affects the quality of the writing production, involves feeling more anxious, and is related with a conception of writing as a matter of knowledge telling (Castelló et al., 2009).

To finish, a third group of studies focusing on writing interventions has been included. Although they are not directly concerned with psychological well-being, different variables related to well-being emerged in their results when graduates were asked about their writing experiences. The most common variables were anxiety (Cohen,

1998; Kamler, 2008), stress (Hagerman-Muller, 1986), diverse levels of confidence (DeLyser, 2003; Kamler, 2008), avoiding (Bishop, 1993), and also general satisfaction (Surratt, 2006; DeLyser, 2003; Caffarella & Barnett, 2000; Kumar & Stracke, 2007). One specific subgroup underlined the negative emotional aspects of the critiquing process when getting feedback (Caffarella & Barnett, 2000; Crossouard & Pryor, 2009; Can & Walker 2011; Li & Seale, 2007). These studies have generally been interested in demonstrating that after participating in writing interventions, graduates could adopt a more positive and adaptive position towards writing.

Gender differences

Studies aimed at analyzing writing conceptions have rarely looked on gender differences. Lavelle and Bushrow (2007) found no differences when measuring the writing beliefs and strategies that graduate females and males used. In the same line, Klassen and Kuzuku (2009) found no differences in levels of writing procrastination between boys and girls in their study with high school students. Also no gender differences were found in writing self-efficacy beliefs in high school students (Villalón, Mateos & Cuevas, in press) (no more studies were found at graduate neither undergraduate level). Gender differences were found, however, when psychological well-being was analyzed. In the study of Boice, Shaughnessy and Pecker (1985), more females than males felt excessive pressure to publish, and fewer females had managed to ignore rude editorial rejections, even though males and females were equivalent in productivity and publishing. This finding is in line with the general statement supported by the literature that highlights women to experience more distress during their postgraduate studies than men (Kurtz-Costes, Helmke, & Ülkü-Steiner, 2006; Toews, Lockyer, Dobson, & Brownell, 1993; Toews et al., 1997; Nelson, Dell'Oliver, Koch, & Buckler, 2001; Ülkü-Steiner et al., 2000) and more dissatisfaction with their overall study experience (Seagram et al., 1998).

In our research we would like to contribute to bridging some gaps found in the literature, mainly exploring the linkage between writing conceptions and psychological well-being. According to this research line, we have evidence from two previous studies

in two different contexts –Finland and Spain- exploring these connections (Cerrato-Lara & Castelló, 2011; Lonka et al., 2014). These studies are interesting, especially because psychological well-being variables have been tested very little in the frame of writing tasks at graduate level, as it was shown in the review. With the results of these two previous studies, we would like to find out cross-cultural patterns regarding PhD students' writing conceptions and psychological well-being, considering data has been collected using the same instrument. Besides, we would also like to explore PhD students' profiles as a result of combining these two dimensions in the Spanish population.

3. METHOD

3.1. Aims

3.2. Contextualization of the research

3.3. Participants

3.4. Instrument

3.5. Translation and adaption of the instrument to the Spanish population

3.6. Data collection

3.7. Statistical analysis

3.1. Aims

The aims of the current research are a) to translate and adapt *The Writing Process Questionnaire* (Lonka et al., 2014) in the Spanish population, and b) to explain the relationship between writing conceptions and psychological well-being at graduate level. These general aims are pursued by addressing the following objectives:

- Analyzing the factorial structure, reliability and the convergent and discriminant validity of the instrument.
- Assessing the existence of cross-cultural patterns regarding PhD students' writing conceptions and their psychological well-being in two countries.
- Establishing doctoral students' profiles combining their writing conceptions and their psychological well-being in the Spanish population.

3.2. Contextualization of the research

Both in Finland and Spain, as participating countries of the Bologna process, doctoral studies belong to the third cycle of university studies. Finnish PhD students represent 11% of university students (OSF, 2013), whereas in Spain only 4.2% (INE, 2012). The number of PhD enrolments and graduates per year is higher in Finland (24.682 and 1.500 respectively in 2007; OSF, 2013) than in Spain (72.741 and 7.150 in the same year; INE, 2012), considering that Spain is the 5th most populated country in the EU and Finland the 2nd least densely populated. Universities in the Finnish context are state-run institutions primarily financed from the state budget, whereas in the Spanish context 37% are private.

Regarding the organization and structure of PhD studies, in Finland the *Universities Act* gives every single university extensive latitude for independent decisions. They can design and implement their own doctoral education rules and policies, as there are no detailed regulations on its content (including course work). Doctoral degrees require a thesis, seminars, coursework (40-80 ECTS) and a public defence of the thesis. In Spain PhD studies are structured into different programmes. Each programme is planned,

designed and coordinated by an Academic Commission and includes a series of courses, seminars, other academic activities focused on research training (not requiring an ECTS structure), the thesis and its public defence. In any case, in both countries the thesis forms the majority of the work, so the central activity at this level is research.

As for the content of PhD studies, despite the creation of the EHEA, Scandinavian doctoral programmes, following their traditionally informal and flexible style, offer coursework usually constructed individually based on personal study plans that typically include international conferences and methodological studies. In Spain, coursework is shaped by the offers of the doctoral programme in which the PhD student is enrolled in. However, in the last years the variety of doctoral programmes offered by the universities (sometimes Doctoral Schools within universities) or by other competent educational institutions has increased, because these studies may be jointly organised by several universities or include the participation of other RDI bodies, centres, institutions or entities.

Concerning admission, in Finland a pre-doctoral degree of *lisensiaatti/licentiat* (Licentiate) may be taken previously and the applicant typically has to submit a detailed research plan and a study plan that will then have an annual follow-up. Some faculties and graduate schools stipulate high grades for the applicant's master thesis (generally, there is considerable variability between universities and faculties). By contrast, in Spain in order to be accepted into an official PhD programme the only requirement is to hold a Bachelor's degree or equivalent, and a Master's degree. Universities are entitled to establish additional selection and admission criteria for applicants to specific PhD programmes. In any case, it is once Spanish students are admitted they have to devise a research plan before the end of the first year that can be modified throughout the programme. Recent Spanish regulations also require students and supervisors to submit a detailed research plan and an activity plan that will then have an annual follow-up.

In reference to financing, PhD studies in Finland are publicly funded with no cost to students. In contrast, in Spain candidates must pay a fee for academic mentorship every year. However, in none of these countries admittance to PhD studies automatically implies a grant or that the student will belong to the university academic staff. In both

countries candidates have the chance to fund their doctoral studies in similar ways (a 4-year doctoral programme position funded by the state, other university posts, personal grants -also from private foundations-, project funding, etc.), but at this moment funded positions in doctoral schools is growing in Finland and decreasing in Spain. In general, competition for scholarships is tight and some students, thus, earn a living in the private sector while doing their PhD. This is a very representative way to fund postgraduate studies in both countries, especially in Science and Technologies.

Regarding mentorship, in Finland PhD candidates have at least one advisor (a full professor) and one supervisor that may also be the same person (sometimes they may also have a supervisory board). In Spain, the Academic Commission assigns an advisor to each doctoral candidate and, within a maximum period of six months after registration, a supervisor (not necessarily a full professor)³ who may be the same person or not. In both countries thesis may be co-directed by other doctors. In the Finnish context there are no detailed regulations on supervision, whereas in Spain a written agreement must be signed including procedures for conflict resolution. Universities also open a personal activity portfolio of the candidate evaluated together with the Research Plan and the reports issued by the mentor and the thesis director. In order to be allowed to continue in the programme, students must receive a positive evaluation in these documents. If they do not, they can be assessed again after six months, during which time they must draw up a new Research Plan, but if results are still negative, they are not allowed to remain in the programme.

Concerning the time regulated to complete a PhD, in Spain it is 3 years of full-time dedication (2 additional may be authorised) and 5 on a part-time basis. In Finland, students that exceed 7 years are included in a follow-up register and cannot proceed with their studies until their faculties have accepted their personal study plans. Until very recently candidates in both countries did not have time limitations to finish their PhD. In Finland, following its liberal policy, this license was valid for life. Thus, there were a large number of students no longer pursuing their PhD, but had not informed their universities. In Spain, depending on the doctoral regulations (which have varied

³ It will be necessary to have a permanent or temporary link with the university department or institute that coordinates the Ph.D. program, or that he /she has previously been authorized by the doctoral committee of the corresponding university.

dramatically during the last 15 years) and on the universities, a fare had to be paid every academic year in order to remain enrolled in PhD studies. Yet, there were candidates paying the fare in order not to be thrown out, but not actively working on their theses. This situation, together with alarming rates of withdrawal in both countries (Martinsuo & Turkulainen, 2011; Bermúdez et al., 2009), explains the low rates of thesis defended (8.74% in Finland, OSF, 2013; 11.76% in Spain, INE, 2012 in years 2007-2011) and the average times to complete PhD studies (6 years and 4 months in Finland, Sainio, 2010; 7.16 years in Spain, INE, 2012) - a situation that will hopefully improve after the Bologna process.

Concerning the evaluation process to complete the thesis, either in a form of a monograph or as a summary of articles, it is evaluated by means of a public defence, but the procedure is slightly different in both countries: the manuscript has to be reviewed by pre-reviewers named by the Faculty Council in Finland (usually full professors from other universities) and three pre-reviewers in Spain (accredited research experience is required), named by the doctoral committee of the PhD programs with the advices of the supervisor and the advisor if that is the case. In Finland the Faculty Council then decides whether the student is given permission to publicly defend the thesis and names the opponent (at this stage the thesis is published with an ISBN number and sent to the opponent). In contrast, in Spain a) the candidate is authorized by the supervisor (and the advisor when the first does not belong to the candidate's university staff) that presents the proposal of the board of examiners, signed by the responsible of the PhD programs, to the doctoral committee which decides on the thesis defence, b) the board of examiners does not have a specific opponent member, but three members (being one of them the president and the other the secretary) and two reserves and c) at this stage the thesis is not published yet as a period of 15 days is opened during which any doctor can make any consideration and it is after this period that the doctoral committee of the university decides whether or not authorize its defence. Next, in Finland after a doctoral candidate has publicly defended the thesis, the opponent decides whether to recommend its ratification and the Faculty Council decides on awarding the doctoral degree, whereas in Spain it is the board of examiners that decide unanimously to pass or fail the thesis considering, if needed, the candidate's personal activity portfolio as well.

To finish, insertion of PhD holders in the labour market is generally favourable in Finland whereas not particularly in Spain, although some actions have been carried out to confront this challenge (among them, the creation of scientific and technological parks and, more recently, the Industrial Doctorates Plan by the Government of Catalonia). This could be due to the Spanish industrial structure, which receives less funding for research and development than the Finnish one.

3.3. Participants

Spanish sample

The sample consisted of 631 Spanish PhD students (male: 42%; female: 58%; mean age: 31.5) in the research period of their doctoral studies doing their dissertation in Science (32.8%), Arts and Humanities (18.3%), Engineering and Architecture (17.3%), Legal and Social Science (15.9%) and Health Science (15.7%) –according to the branches of knowledge classification of the *Ministerio de Educación, Cultura y Deporte*. Table 1 shows more details about this distribution regarding gender and age.

Table 1. Fields of study of the Spanish population (N=631) regarding gender and age

Fields of study	Distribution	Male	Female	Mean age
Arts and Humanities	18.3%	42%	58%	33
Legal and Social Sciences	15.9%	41%	59%	35
Health Science	15.7%	31%	69%	31
Science	32.8%	39%	61%	29
Engineering and Architecture	17.3%	61%	39%	30

The response rate was 7%. Nearly all of the participants (92.3%) were enrolled at 29 out of the 77 (81 in 2013) Spanish universities (public: 88%; private: 4.3%). The remaining 7.6% were enrolled in other Spanish research institutions. All participants were residing in Spain at the time of completing the questionnaire. A considerable amount of them (67.4%) reported working full-time on their dissertation (male: 40%; female: 60%) and the other 32.6% part-time (male: 47.3%; female: 52.7%). Slightly more than a half (51.9%) was working alone, a bit less (41.5%) both alone and in a group, while only

6.5% in a research group. Table 2 shows students' working conditions on the thesis for each domain. Altogether, 59% of the students had considered dropping out their PhD at some point during their doctoral process.

Table 2. Working conditions on the thesis in the Spanish population (N=631)

Thesis work	Arts & Humanities	Legal & Social Sciences	Health Science	Science	Engineering & Architecture
<i>Alone</i>	81%	74%	35%	34%	49%
<i>In a group</i>	-	1%	12%	9%	9%
<i>Both</i>	19%	25%	53%	57%	42%
<i>Full-time</i>	58%	48%	59%	83%	72%
<i>Part-time</i>	42%	52%	41%	17%	28%

Comparing our sample with the figures provided by the INE- *Instituto Nacional de Estadística* [National Statistics Institute] for 2011 when data was collected (also the newest statistics to date), it was well representative in terms of mean age and type of institution (meaning, if participants conducted their PhD *inside* or *outside* university). It was partially representative for gender: meanwhile the INE reported a greater balance between males and females, in our sample there was an 8-11% increase of females for each branch of knowledge (it should be noted that gender distribution per area was not available in INE from students enrolled in 2011, but it was for the number of theses read in that year, so we referenced it for this calculation).

Fields of study were partially representative as well: although Science was the predominant field, in the INE it was followed by Health Science and then Legal and Social Science. However, if we instead consider the general classification between Arts and Sciences, the dominant field of study corresponded to Sciences as the INE also reported. All the students were in the research period of their doctoral studies as these were the ones required to reply when data was collected.

Finnish sample

The sample consisted of 939 Finnish PhD students (male: 31%; female: 69%; mean age: 36.6) in different phases of their doctoral studies, although the majority were advanced

students in their thesis process. They were pursuing their dissertation in Arts and Humanities (41.2%), Legal and Social Science (26.1%), Health Science (20.2%), Science (6.8%) and Engineering and Architecture (5.7%) based on the same classification as the Spanish sample, instead of The International Standard Classification of Education (ISCED) that are used in Finland. Table 3 shows more details about this distribution regarding gender and age.

Table 3. Fields of study of the Finnish population (N=939) regarding gender and age

Fields of study	Distribution	Male	Female	Mean age
Arts and Humanities	41.2%	29%	71%	34
Legal and Social Sciences	26.1%	29%	71%	40
Health Science	20.2%	19%	81%	38
Science	6.8%	46%	54%	37
Engineering and Architecture	5.7%	66%	34%	34

The response rate was 29%. Participants were enrolled at 3 out of the 13 (14 in 2013) Finnish universities: University of Helsinki (64.1%), University of Tampere (18.7%) and University of Oulu (17.1%). Half of them (49.4%) reported working full-time on their dissertation (male: 28.8%; female: 71.2%), and the other half (50.6%) part-time (male: 33.3%; female: 66.7%). A majority of them (78.3%) were working alone, only 10.9% in a research group, while the other 10.8% were working both alone and in a group. Table 4 shows students' working conditions on the thesis for each domain. Altogether 45% of the students had considered dropping out their PhD at some point during their doctoral process.

Table 4. Working conditions on the thesis in the Finnish population (N=939)

Thesis work	Arts & Humanities	Legal & Social Sciences	Health Science	Science	Engineering & Architecture
<i>Alone</i>	94%	81%	45%	76%	70%
<i>In a group</i>	2%	7%	34%	14%	13%
<i>Both</i>	4%	12%	21%	10%	17%
<i>Full-time</i>	54%	37%	54%	63%	53%
<i>Part-time</i>	46%	62%	46%	37%	47%

We compared our sample to all Finnish PhD students based on the statistics gathered by Statistics Finland for 2006-2007 when the data was collected. The comparison showed that our sample was quite representative in terms of mean age, although slightly lower than the mean age of all Finnish PhD students (mean age= 37.94). Gender was not well represented as we collected more responses from females, while the global data was quite balanced (males: 46%; females: 54%). However, the gender inside of each field of study was well represented, except for Science in which there were slightly more males than females, whereas in the sample collected just the opposite.

Regarding fields of study, only Legal and Social Sciences were well represented. If we instead consider the general classification between Arts and Sciences, the dominant field of study corresponded to Arts whereas the statistics gathered by Statistics Finland for 2007 reported very balanced scores between both fields, but slightly higher for Science. Students who had completed more than two-thirds of the thesis process were somewhat overrepresented, perhaps because these students had more experience, and therefore they may have felt that they could participate in the study (Pyhältö et al., 2012).

3.4. Instrument

The PhD student survey contains a total of 78 questions: 53 Likert-type statements concerning PhD students' conceptions of their learning environment, their psychological well-being and their academic writing conceptions, 17 socio-demographic background variables and eight open-ended questions about the personal doctoral journey. The Likert-type statements were organized along 14 scales and ranged from 1 (do not agree) to 5 (fully agree) for all questions except the one-item stress scale, whose alternatives varied from 1 (not at all) to 5 (very much). The survey was seen to take about 45 minutes to be completed. Appendix 1 shows the English version of the instrument.

Next, we are going to describe the sections analyzed for the present dissertation which are: 1) the Likert-type statements concerning academic writing conceptions, 2) the

Likert-type statements concerning psychological well-being, 3) 6 socio-demographic background variables, and 4) one open-ended question.

1) *The Writing Process Questionnaire* (Lonka et al., 2014): The Likert-type statements concerning academic writing belong to *The Writing Process Questionnaire*, which measures writing conceptions, especially about thesis writing, and how PhD students see themselves as writers. It contains 25 statements forming the following scales: blocks, procrastination, perfectionism, innate ability, knowledge transforming and productivity (see Table 5).

Table 5. Items and scales of *The Writing Process Questionnaire*

Blocks

My previous writing experiences are mostly negative
I sometimes get completely stuck if I have to produce texts
I find it easier to express myself in other ways than writing
I only write when the situation is peaceful enough
I hate writing

Procrastination

I often postpone writing tasks until the last moment
Without deadlines I would not produce anything
I find it difficult to start writing
I start writing only if it is absolutely necessary

Perfectionism

I find it difficult to write, because I am too critical
Writing is difficult because the ideas I produce seem stupid
I could revise my texts endlessly
I find it difficult to hand over my texts, because they never seem complete

Innate ability

The skill of writing is something we are born with; it is not possible for all of us to learn it
Writing is a skill, which cannot be taught

Knowledge transforming

Writing often means new creating ideas and ways of expressing oneself
Writing develops thinking
Rewriting texts several times is quite natural
Writing is a creative activity
It is useful to get other people's comments on texts
When I write I am concerned about whether the reader understands my text

Productivity

I produce a large number of finished texts
I am a regular and productive writer
I write regularly regardless of the mood I am in
I write whenever I have the chance

Blocks: Inability to write productively, not due to insufficient literary skills or intellectual capacity (Rose, 1980). Boice (1993) concluded that blocking seldom has a single cause, and that many different maladaptive thoughts may be related. According to Henning (1981), perfectionism is often at the root of the block.

Procrastination: Pattern of postponing or failing to start tasks that are important in terms of success; such behaviour is seen to undercut productivity. Procrastination can be defined as a form of self-regulatory failure, extremely prevalent in academic work (Steel, 2007; Onwuegbuzie & Collins, 2001), especially in writing tasks (Klassen & Kuzucu, 2009; Klassen et al., 2010). It has been positively related with blocks (Boice, 1996) and with perfectionism (Onwuegbuzie, 2004), although for this last linkage most of the literature does not focus specifically on writing studies (Solomon & Rothblum, 1984; Onwuegbuzie, 2000; Brownlow & Reasinger, 2000; Flett, Blankstein, Hewitt, & Koledin, 1992; Flett et al., 2012). For this last association –with perfectionism- positive and negative correlations have been found depending on how perfectionism was understood, either adaptive or maladaptive (Speirs-Neumeister, 2004; Chi, Zhao, Hou & Lin, 2012); also positive correlations were shown for both procrastinators and non-procrastinators, but with varied interpretations of perfectionism for each group (Ferrari, 1992). According to Onwuegbuzie (2000), graduates may procrastinate more than undergraduates. Along the literature, procrastination is understood not only as maladaptive, passive or negative, but also as adaptive, active or positive.

Perfectionism: Constant insistence on a perfect product, with the result that one attempts to rework material until it is free of all flaws, or ultimately giving up all efforts (Boice, 1993). Delaying writing a term paper may be indicative of perfectionism for graduate students (Onwuegbuzie, 2004), the same way as it was found when prolonging to design research proposals (Onwuegbuzie, 1997). Along the literature, perfectionism is understood as adaptive, active, positive or healthy *versus* maladaptive, passive, negative or unhealthy/neurotic.

Innate ability: The fact of believing in one's innate ability concerns students' personal epistemologies having relevance to their study practices in higher education (Lonka et al., 2008). It may be misleading to think that writers mainly work alone and they have a

special, innate gift to communicate their valuable message (see, e.g. Sawyer, 2009). Even if writing itself appears to be a solitary activity, it is essentially a form of communication that takes place in the scientific community.

Knowledge transformation: Building deep-level mental representation of the task, engaging in active and reflective problem-solving, reflecting and relating to the nature of the task, or considering the anticipated audience are skills labelled as knowledge transforming (Bereiter & Scardamalia, 1987). Experienced writers use the writing process not only as a means of telling what they know, but as a way of exploring and developing their ideas, that is to say, as a tool for meaning-making and learning. This deep approach to writing and its opposite (surface approach), have been a source of inspiration for plenty of empirical works about writing.

Productivity: Sense of productivity, together with knowledge transforming and optimism, is also essential for writing. Most of the literature about writing productivity measures quantifiable production, but this is not in line with our interest. Instead, we focus on the sense of one's own productivity as an important part of self-efficacy in writing. In this regard, self-efficacy has been negatively related with procrastination (Pajares, Britner, & Valiante; 2000), not only for writing but also for general academic tasks (Klassen et al., 2010; Klassen et al., 2009; Klassen & Kuzucu, 2009; Klassen, Krawchuk, Lynch, & Rajani, 2008; Wolters, 2003; Ferrari, Parker, & Ware, 1992). It has also been negatively related with perfectionism for learning and performance in general (Mills & Blankstein, 2000).

2) *Psychological well-being variables:* The Likert-type statements concerning psychological well-being belong to the MED NORD questionnaire (Lonka et al., 2008) -addressed to university students of 2nd cycle- that were modified in Pyhältö et al. (2009) to fit the PhD context. Altogether 10 items measure experienced stress (Elo, Leppänen, & Jahkola, 2003), exhaustion (Maslach & Jackson, 1981) as well as anxiety and lack of interest (Mäkinen, Olkinuora, & Lonka, 2004) (see table 6).

Table 6. Items and scales measuring psychological well-being*Stress*

Do you feel this kind of stress these days?

Exhaustion

I feel exhausted

My workload is often too high

Doctoral studies are too stressful for me

I worry about the thesis in my free time

Anxiety

I often fear that I will fail in my doctoral studies

I am stressed out by the workload, dead-lines and competition in doctoral studies

I often have to force myself to work for my thesis

Lack of interest

It is difficult for me to find meaning in my doctoral studies

I am not motivated by the content of my studies

Stress: Along the literature, high stress has been associated with perfectionism (Nilsson, Butler, Shouse, & Joshi, 2008; Ashby, Noble, & Gnilka, 2012; Park, Choi, Nam, & Lee, 2011; Chang, 2006; Rice, Leever, Christopher, & Porter, 2006; Chang, Watkins, & Banks, 2004; Chang & Rand, 2000), procrastination (Tice & Baumeister, 1997; Jackson, Weiss, & Lundquist, 2000; Sirois & Tosti, 2012; Flett et al., 2012) and self-efficacy (Lavasani, Khezriazar, Amani, & Malahmadi, 2011). Specifically concerning writing, it has not found to necessarily correlate with blocks. Hagerman-Muller (1986) found that all PhD students -experiencing few or a lot blocks- displayed high levels of stress.

Exhaustion: Ferrari and Thompson (2006) presented psychological exhaustion as a result of procrastination. It has also been associated with perfectionism (Chang et al., 2011; Childs & Stoeber, 2012; Mitchelson & Burns, 1998; Gotwals, 2011; Azizi & Nikbakhsh, 2013) and negative correlations have been found with perceived productivity (Nayeri, Negarandeh, Vaismoradi, Ahmadi, & Faghihzadeh, 2009; Taris & Schreurs, 2009). Specifically concerning writing, no studies were found.

Anxiety: It has been found to correlate positively with procrastination (Schraw, Wadkins, & Olafson, 2007; Speirs-Neumeister, 2004; Alexander & Onwuegbuzie, 2007; Rothblum, Solomon, & Murakami, 1986; Haycock, McCarthy, & Skay, 1998;

Rodarte-Luna & Sherry, 2008; Hayashi, 2009; Grunschel, Patrzek, & Fries, 2013; Van Eerde, 2003; Spada Hiou & Nikcevic, 2006), but not according to Steel (2007) neither Lay and Silverman (1996). Connections have also been found with perfectionism (Onwuegbuzie & Daley, 1999; Mills & Blankstein, 2000; Gregersen & Horwitz, 2002; Eum & Rice, 2011; Gnilka, Ashby, & Noble, 2012; Walsh & Ugumba-Agwunobi, 2002), but not according to Yondem (2007). Anxiety has also been found to correlate negatively with self-efficacy (Bandura, 1988; Bembenutty, 2009; Lavasani et al., 2011; Díaz, Glass, Arnkoff, & Tanofsky-Kraff, 2001). Specifically concerning writing, it has been found to correlate positively with procrastination (Onwuegbuzie, 2004; Fritzsche, Young, & Hickson, 2003; Beswick, Rothblum, & Mann, 1988; Flett et al., 2012) and perfectionism (Moore, 2010). In regard to writer's block, according to Cohen (1998) any pause in text production during the writing process can harden into a writer's block, if the pause raises sufficient anxiety in the writer.

Lack of interest: Some studies negatively relate perfectionism -in its maladaptive form- with achievement motivation (Korajlija, Jokić-Begić, & Kamenov, 2003; Chi et al., 2012). When it is understood in an adaptive way, it correlates with engagement (Zhang, Gan, & Cham, 2007). Other studies find correlations both in adaptive and maladaptive ways (Mills & Blankstein, 2000; Speirs-Neumeister, 2004; Miquelon, Vallerand, Grouzet, & Cardenal, 2005). In relation to procrastination, it was found to relate with low intrinsic motivation (Cao, 2012) and with lack of self-determined motivation (Lee, 2005). Chi et al. (2012) also found that achievement motivation had a significant mediating effect on the relationship between perfectionism and procrastination. Regarding self-efficacy, some studies found connections with motivation (Aguilar, Martínez, Valencia, Romero, & Vargas, 2001; Erez & Judge, 2001) –but not according to Vancouver and Kendall (2006)-, with task interested (Hackett & Campbell, 1987) and with engagement (Salanova, Llorens, & Schaufeli, 2011; Galyon, Blondin, Yaw, Nalls, & Williams, 2012), although not in a traditional, but in an online environment, according to Spence and Usher (2007). Specifically concerning writing, according to White and Bruning (2005) graduates with higher scores on engagement during writing tasks scored higher on writing quality. Additionally Gute and Gute (2008), concerning the writing-to-learn activities planned, found that students presented procrastination, as well as blocks, as forms of academic disengagement.

3) *Socio-demographic background information section*: The ones used for this study are six, namely, age, gender, native language, main subject and working conditions on the thesis (full-time vs. part-time; working mainly on one's own, as much on one's own as in a research team or mainly in a research team). The type of questions and the number of alternatives varied across questions. In Appendix 1, 2 and 3 the reader will find all them in their different language versions.

4) *Open-ended questions*: This section mainly focuses on students' ideas of the PhD process and its main regulators (e.g. problems and critical incidents), perceptions of themselves as being a part of the scholarly community and perceptions of supervision. The one used for this study is the first part of the following: "Have you ever considered interrupting your doctoral studies? If you have, what were the reasons?". In Appendix 1, 2 and 3 the reader will find all them in their different language versions.

3.5. Translation and adaptation of the instrument to the Spanish population

The questionnaire, originally in Finnish and English, was translated to Spanish and Catalan (see Appendix 2 and 3 respectively) and adapted to the Spanish context based on its English version following the criteria proposed by Hambleton (2005) and Daouk, McDowall and Rust (2006) relative to guarantees of conceptual, linguistic and metric equivalence expected of a questionnaire that is adapted to a new cultural context. To ensure linguistic equivalence, a process of translation and back-translation was carried out; to account for cultural or psychological equivalence, a cognitive interview was conducted; finally, the analysis of the psychometric properties of the instrument in a field study ensured the statistics equivalence.

To ensure double translation process it was proceeded as follows. First, a team of researchers, with a high level of English, whose first language was Spanish, discussed the items and translated consensually an early version of them. Second, a native English teacher with a degree in Psychology and a high level of competence in Spanish

language, translated it back to Spanish. Both versions were collated by the authors of this work and were reviewed in the doubtful cases, ensuring the meaning of all items was the same and that there were no notable changes between the two versions. Lastly, a Spanish corrector reviewed the final text. The same process was done for the Catalan language, because the first data was supposed to be collected in Catalonia –where the thesis candidate was conducting her research-, taking in consideration that Catalan and Spanish are both co-official languages. This provided the opportunity for the participants to reply in the language they felt more comfortable with.

This initial version of the questionnaire was administered to a pilot sample of 206 PhD students at the Universitat Ramon Llull (Barcelona) in the academic years 2008-2009 and 2009-2010. The interviewers were present when the questionnaires were replied and asked a subsample of 40 students in groups of 10 to loudly comment on the meaning of each item and doubts that aroused them. In addition, they were asked about specific aspects that could cause confusion.

From the results, we slightly modified the wording of some items to enhance their understanding (some synonyms were used and some expressions were modified) and the final version of the questionnaire was developed in virtual support for online administration. According to Dillman (2007), Miller and Lambert-Shute (2009) and Martinsuo and Turkulainen (2011), this channel has advantages over the traditional (in paper) like the low cost and confidentiality, an immediate and more comfortable collaboration, low bias of the interviewer and greater opening to answer sensitive/delicated/private questions.

3.6. Data collection

Data collection in the Spanish population

All the universities along Spain were asked to participate in our study applying the criterion of variation to which Patton (1980) referred to as a "maximum variation sampling strategy" (p. 102) in order to obtain a sufficient geographically diverse sample

of doctoral candidates that could account for our study phenomenon -doctoral experience- from the maximum possible points of view. 29 universities accepted to participate. In January 2011 the participating universities received through email a web link (URL) that redirected to the PhD student survey⁴.

The PhD student survey was sent electronically for practical reasons. It was created using *Google Docs* (Google Apps). The reason to use this survey tool was that it offers the same benefits as other tools to collect responses for a research project, with the advantages that it is available for free and able to collect unlimited responses, whereas most other tools limit the number of responses to 100-500 in their free versions. The only inconvenience of this survey tool is that it is mandatory to create a Google account, in case the researcher does not have one.

Each university followed different procedures to send their PhD students the questionnaire (from the Academic Secretary, the directors of doctoral programs, doctoral schools if they were institutionalized, etc.) starting in February until June, when it was the deadline for students to reply. Depending on the mechanisms the universities used to send their PhD students the links, they were more or less successful in ensuring that all students would receive it (for example in the cases where it was sent to doctoral schools all faculties could participate, but not in the cases in which it was sent to the directors of doctoral programs). An average of half of the faculties per university collaborated in the study. In no case students' e-mails were provided directly for privacy reasons. In any case the participants were informed of the purpose of the research and about the confidentiality of their data from an introductory text to the questionnaire also requesting their voluntary participation (see text):

⁴<https://docs.google.com/spreadsheet/viewform?formkey=dGIPWWwtUHh0WFE1OE00SzdrQm43S2c6MA> for the Spanish version.

<https://docs.google.com/spreadsheet/viewform?formkey=dGNCQWR4ZEhZLXB5dXhEbFdOVIVvY0E6MQ> for the Catalan version

Below you will find a series of questions about your process as a doctoral student. As you will see, there are no right or wrong answers, but simply to express your point of view with clarity. This is an important phase in the life of any PhD student and we are interested to know how it is managed and what are the challenges and rewards that entails for their protagonists. Having this information can help us better to understand and adjust the help or tutoring that faculty offer throughout the process. The survey is anonymous, so we greatly appreciate that you answer honestly and directly both the open ended questions such as the multiple-choice questions.

A total of 1.017 PhD students replied to the questionnaire and 631 were selected for this study, discarding those that did not fit the profile required for our phenomenon of study. The ones discarded included: 1) the non-Spanish PhD students that despite studying their PhD in our country and mastering Spanish -considering most of them came from South America (It is a pretty typical migration process in our country)-, because there are cultural differences that would need a process of adaptation of the instrument according to this group (that was not the case for the students who replied the questionnaire in Catalan); 2) Spanish PhD students that despite pursuing their PhD studies in our country, at the time of completing the questionnaire were doing a doctoral stay, which would have influenced the dimensions that were intended to be analyzed in the questionnaire by a new scenario, as we wanted to study the doctoral experience in our context, and 3) the PhD students in their doctoral training phase, of which many at this stage had not begun their thesis project, again, based on the fact that our main interest lay in collecting the experience of fully active doctoral dissertation students.

Data collection in the Finnish population (by the Educational Psychology Research Group, University of Helsinki)

Since we are going to compare our data with the Finnish data (*Study 2*), it is important to mention briefly how the Finnish sample was collected. The PhD student survey was sent out as part of a larger national research project (2006–2008) on PhD education in Finland (see a description of this project in Pyhältö et al., 2009). After a pilot study in January 2006 with 45 PhD students majoring in natural sciences, the PhD student

survey was conducted during spring 2006 at the University of Helsinki, and during year 2007 at both the University of Tampere and the University of Oulu.

The students' contact information was collected from the student register database in each of the universities. In the case of the University of Helsinki in 2006, the students received the survey at their home addresses by ordinary mail. Afterwards, a reminder with a link to the online questionnaire was sent to the students' email addresses. On the other hand, for students from the universities of Tampere and Oulu in 2007, the surveys were sent electronically straight away. To finish, at all three universities, students who did not have Finnish as their mother tongue, had the possibility to reply the questionnaire in English.

3.7. Statistical analysis

Three empirical studies are presented in this dissertation. In the first study, we analyzed the empirical structure of *The Writing Process Questionnaire* (Lonka et al., 2014). This was done by means of a Principal Component Analysis (PCA) performed with Varimax rotation, then selecting the items with the highest loads among the items that had a discrimination index greater than .30, as it is generally considered in exploratory analyses (see e.g. Floyd & Widaman, 1995). Next, reliability analysis of components was carried out to corroborate the internal consistency of each scale (the reliability coefficient used was Cronbach's α). Correlations between the subscales were also conducted to check the convergent and discriminant validity of the instrument. To finish, descriptive analyses were conducted.

In the second study, both the scales of writing conceptions and psychological well-being were analyzed in order to find out cross-cultural patterns regarding PhD students' writing conceptions and their psychological well-being in two countries –Spain with the sample already used in the first study, and Finland with the sample provided, as mentioned, by the Educational Psychology Research Group from the University of Helsinki. After presenting the internal consistency of each scale, cross-cultural patterns were looked at by using correlation analysis (using Pearson coefficient), Student's *t*-test (significance level $p < 0.05$), and descriptive analysis.

Lastly, in the third study a Quick Cluster Analysis was conducted using a K-means algorithm to form the groups. Significance was checked applying an analysis of variance (ANOVA) (significance level $p < 0.05$). This examination between-group differences was done using the Bonferroni post hoc-test. This third study was conducted in order to analyse the relationship between writing conceptions and psychological well-being more deeply. This last study was only applied in the Spanish sample, like the first. For all the analysis of the three studies, the SPSS 19.0 software was applied. The next table provides a summary of the three studies.

Table 7. Overview of the study procedures

Study	Participants	Instrument	Analysis
Study 1	631 Spanish PhD students	1) <i>The Writing Process Questionnaire</i> (Lonka et al., 2014)	Factorial analysis (PCA with Varimax rotation) Reliability (Cronbach's α) Correlation analysis (Pearson coefficient) Descriptive analysis
Study 2	1.570 PhD students (Finnish: 939; Spanish: 631)	1) <i>The Writing Process Questionnaire</i> (Lonka et al., 2014) 2) Scale measuring psychological well-being (modified version of the MEDNORD questionnaire, Lonka et al., 2008) 3) Socio-demographic background information questions	Reliability (Cronbach's α) Correlation analysis (Pearson coefficient) Student's t -test ($p < 0.05$) Descriptive analysis
Study 3	631 Spanish PhD students	1) <i>The Writing Process Questionnaire</i> (Lonka et al., 2014) 2) Scale measuring psychological well-being (modified version of the MEDNORD questionnaire, Lonka et al., 2008) 3) Socio-demographic background information questions	Cluster analysis applying analysis of variance (ANOVA) ($p < 0.05$) using the Bonferroni post hoc-test

4. RESULTS

4.1. The Writing Process Questionnaire in the Spanish population (*study 1*)

4.2. Cross-cultural patterns regarding PhD students' writing conceptions and their psychological well-being in Finland and Spain (*study 2*)

4.3. Doctoral students' profiles according to their writing conceptions and psychological well-being in the Spanish population (*Study 3*)

4.1. The Writing Process Questionnaire in the Spanish population (study 1)

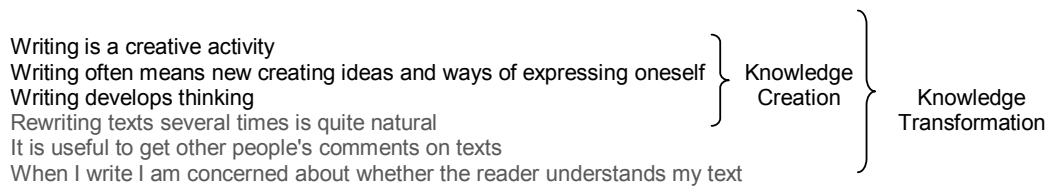
In this section we present the results of our first study. The objective was to analyze how *The Writing Process Questionnaire* (Lonka et al., 2014) worked in the Spanish population. We analyzed its factorial structure and reliability with a sample of 631 PhD students. Correlation analysis between the subscales was also conducted to check the convergent and discriminant validity of the instrument. Some descriptive analysis is shown as well.

Factorial analysis

In order to determine the factorial structure of *The Writing Process Questionnaire* in the Spanish population, we used the Exploratory Factor Analysis, Principal Component Analysis (PCA) algorithm. Sample adequacy measures indicated good data agreement for the factor analysis of the instrument (KMO= .885 and Bartlett's sphericity test, $p < .001$). PCA with Varimax rotation yielded six factors with eigen values of 6.5, 2.1, 1.7, 1.3, 1.1 and 0.9. The factors explained 61.7% of the variance shared by the tests items. The first factor, *Blocks*, explained 29.3% of the variance and contained 6 items. The second, *Procrastination*, explained 9.7% of the variance containing 4 items. *Productivity*, the third factor, explained 7.9% of the variance and included 4 items. The fourth, *Knowledge Creation*, explained 5.7% of the variance containing 3 items. The fifth factor, *Perfectionism*, explained 4.8% of the variance and included 3 items as well. *Innate ability*, the sixth factor, explained 4.2% of the variance and contained 2 items. Factorial structure and items loadings are provided in Table 8.

We removed three items in a seventh factor belonging to *Knowledge Transformation* in the starting factorial structure, because they showed low reliability. Therefore, this multi-dimensional scale was shortened to *Knowledge Creation*, by leaving out the collaborative and revision dimension of the scale (the items that measure whether PhD students see writing as a social act measuring also how likely they are to revise their texts) and keeping the other three items measuring writing as a creative activity.

Consequently, out of the original 25 items of *The Writing Process Questionnaire*, 22 make up the Spanish version (including the Catalan version).



Additionally, one item -“Writing is difficult because the ideas I produce seem stupid”- loading on *Perfectionism* in the original factorial structure loaded on *Blocks* in the Spanish sample. It was not removed as it did not show low loading, inappropriate item-total relationship, or affected negatively the reliability of the scale. In fact, *Perfectionism* also measured more than one dimension -about being too self-critical and about endlessly revising text, thus being likely to load on different factors- loading for the Spanish population in *Blocks*, which is in fact the most complex and multifaceted theoretical construct of all the factors.

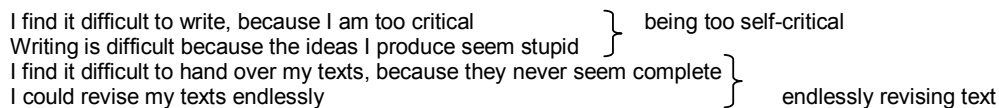


Table 8. Factor loadings of *The Writing Process Questionnaire* items across factors

Items	F1	F2	F3	F4	F5	F6
My previous writing experiences are mostly negative	.746					
I sometimes get completely stuck if I have to produce texts	.524	.460			.352	
I find it easier to express myself in other ways than writing	.627					
I only write when the situation is peaceful enough	.324		-371			
I hate writing	.566	.408				
Writing is difficult because the ideas I produce seem stupid	.659					
I often postpone writing tasks until the last moment		.669				
Without deadlines I would not produce anything		.794				
I find it difficult to start writing	.478	.541				
I start writing only if it is absolutely necessary	.356	.629				
I write regularly regardless of the mood I am in			.726			
I produce a large number of finished texts			.752			
I am a regular and productive writer			.673			
I write whenever I have the chance		-.449	.568			
Writing is a creative activity	-.314			.618		
Writing often means new creating ideas and ways of expressing oneself				.790		
Writing develops thinking				.807		
I find it difficult to write, because I am too critical					.675	
I find it difficult to hand over my texts, because they never seem complete	.397				.637	
I could revise my texts endlessly					.837	
The skill of writing is something we are born with; it is not possible for all of us to learn it						.869
Writing is a skill, which cannot be taught						.837
<i>Eigen values</i>	6.5	2.1	1.7	1.3	1.1	0.9
<i>Proportion of Variance Explained</i>	29.3	9.7	7.9	5.7	4.8	4.2

Reliability

Regarding the internal consistence of the questionnaire, the coefficients of reliability showed satisfactory or good results for each scale (see Table 9). The uni-dimensional constructs *Procrastination*, *Productivity* and *Innate Ability* showed good results. For the Spanish population this was also the case for the most multidimensional factor *-Blocks*, which included one more item for the Spanish population from its original five, being more likely then to increase reliability. The three items belonging to a seventh factor for the Spanish population were deleted as they scored below .42.

Table 9. Internal consistency (Cronbach's Alpha) of the scales

Factors	Alpha
Blocks	.77
Procrastination	.79
Productivity	.75
Knowledge creation	.65
Perfectionism	.65
Innate ability	.75

Convergent and discriminant validity

The intercorrelations between the six factors of *The Writing Process Questionnaire* listed in Table 10 demonstrated the convergent and discriminant characteristics of the instrument for the Spanish population. On the one hand, *Blocks*, *Procrastination*, *Perfectionism* and *Innate Ability* correlated positively with each other; this was also the case between *Knowledge Creation* and *Productivity*. These results supported the convergent validity of these factors. On the other hand, *Blocks*, *Procrastination*, *Perfectionism* and *Innate Ability* correlated negatively with *Productivity* and with *Knowledge Creation* (except for *Perfectionism*). These results supported the discriminant validity of these factors.

Table 10. Pearson correlations among factors

	1	2	3	4	5
1. Blocks					
2. Procrastination	0.664**				
3. Perfectionism	0.519**	0.449**			
4. Innate Ability	0.273**	0.198**	0.184**		
5. Knowledge creation	-0.264**	-0.209**	-0.031	-0.205**	
6. Productivity	-0.496**	-0.614**	-0.269**	-0.120**	0.261**

Note: * $p < 0.05$; ** $p < 0.001$

Descriptive analysis

Table 11 shows the mean and standard deviations of the scales. The participants displayed high scores for *Knowledge Creation* and medium scores for the rest of the

scales, although with different degrees in this second group: the lowest for *Innate Ability* and the highest for *Procrastination*.

Table 11. Means and standard deviations (SD) of the scales

Factors	Mean	SD
Blocks	14.93	4.95
Procrastination	12.25	4.02
Perfectionism	9.33	2.94
Innate ability	3.97	1.91
Knowledge creation	12.77	2.00
Productivity	10.55	3.56

In Table 12 we find some differences between female and male PhD students regarding their writing conceptions. Significant differences were found in *Perfectionism* and *Procrastination*, where females scored higher, as well as *Productivity* in which males scored higher.

Table 12. Gender differences in writing: means, standard deviations (SD) and p-values

	Gender	Mean	SD	<i>p</i>
Blocks	Male	2.08	.70	.108
	Female	2.18	.73	
Procrastination	Male	2.95	1.01	.014
	Female	3.15	.99	
Perfectionism	Male	2.74	.85	.004
	Female	2.94	.86	
Innate Ability	Male	1.97	.92	.736
	Female	2.00	.98	
Knowledge creation	Male	4.28	.68	.477
	Female	4.24	.66	
Productivity	Male	2.72	.83	.029
	Female	2.58	.85	

Note: significance level $p < 0.05$

4.2. Cross-cultural patterns regarding PhD students' writing conceptions and their psychological well-being in Finland and Spain (study 2)

This section includes the results regarding the second objective of this work. The idea was to research cross-cultural patterns regarding PhD students' writing conceptions and their psychological well-being in Finland and Spain. To address this objective we analyzed the items of *The Writing Process Questionnaire* and some psychological well-being variables collected in The PhD student survey for both populations (the Spanish with the sample already described and the Finnish with the sample provided, as mentioned, by the Educational Psychology Research Group from the University of Helsinki). Cross-cultural patterns were looked at by using correlation analysis (using Pearson coefficient), Student's *t*-test (significance level $p < 0.05$) and descriptive analysis. Before discussing these results, we present the internal consistency of each of the scales for both populations. To compare the two cultures, only the common items that worked in both samples were considered; so the item that for the Spanish sample loaded on *Blocks* and for the Finnish on *Perfectionism* was not considered, neither the three items in *Knowledge transformation* that did not work in the Spanish population.

Reliability

Concerning *The Writing process Questionnaire*, the reliability Alpha was satisfactory or good for each scale in both populations (see Table 13). Results across the two cultures differed in one or two scores for each scale, but for *Knowledge Creation* the Finnish population obtained markedly better scores. Conversely, the Spanish population obtained markedly better scores in *Blocks*. For *Productivity* both populations obtained the same scores.

Table 13. Internal consistency (Cronbach's Alpha) for *The Writing Process Questionnaire* scales for the Finnish and the Spanish population

Factors	Alpha (Finnish population)	Alpha (Spanish population)
Blocks	.67	.76
Procrastination	.81	.79
Productivity	.75	.75
Knowledge Creation	.71	.65
Perfectionism	.67	.65
Innate ability	.74	.75

The psychological well-being variables that were also measured through the PhD student survey obtained a higher Alpha for the Finnish population, especially *Exhaustion* and *Lack of interest*. *Stress* reliability could not be calculated as it consisted of a single item (see Table 14).

Table 14. Internal consistency (Cronbach's Alpha) of some psychological well-being variables for the Finnish and the Spanish population

Factors	Alpha (Finnish population)	Alpha (Spanish population)
Stress	-	-
Exhaustion	.82	.72
Anxiety	.65	.61
Lack of interest	.75	.67

Correlations within and among scales - inside and across countries

In the previous study we presented correlation analysis among the scales of *The Writing Process Questionnaire*. Here, we present these correlations again, this time for the Finnish and the Spanish populations with the changes mentioned to adjust the samples for comparison, while also considering some well-being variables, underlying when they are especially significant for one of the populations.

In respect to the writing variables, *Blocks*, *Procrastination*, *Perfectionism* and *Innate ability* correlated positively with each other, especially *Blocks* and *Procrastination*, except *Innate ability* that did not correlate with any of the above in the Finnish population. In addition, *Knowledge Creation* and *Productivity* correlated positively with

each other. Conversely, *Productivity* strongly correlated negatively with *Procrastination*, *Blocks*, and to a lesser extent with *Perfectionism* and *Innate ability*, which did not correlate in the Finnish population. Further, *Knowledge Creation* correlated negatively with *Blocks*, *Procrastination* and *Innate ability*. Results were in all cases more significant for the Spanish population.

Regarding well-being, all ill-being scales correlated positively with each other, especially *Stress* and *Exhaustion*. Contrary to the writing variables, results were in all cases more significant for the Finnish population, except *Lack of interest* with *Stress* where the correlation was slightly higher for the Spanish population.

Concerning writing and well-being, all ill-being factors correlated significantly with most problems in writing; *Blocks*, *Perfectionism*, and *Procrastination* correlated positively with *Stress* (especially with *Procrastination* in the Finnish and with the other two in the Spanish population), *Exhaustion* (especially in the Finnish population), *Anxiety* and *Lack of interest* (these last two more significantly in the Spanish population). *Innate ability* only correlated with *Lack of interest* and with *Anxiety* and *Stress* for the Spanish population. In addition, *Productivity* correlated negatively with all ill-being scales -except for *Exhaustion* that did not correlate in the Spanish population. All of them were more significant for the Finnish population. Lastly, *Knowledge Creation* correlated negatively with *Lack of interest* and with *Anxiety* -this last one only in the Spanish population (see Table 15 and 16).

Table 15. Pearson correlations between some writing conceptions and some well-being variables in the Finnish sample

	1	2	3	4	5	6	7	8	9
1. Blocks									
2. Procrastination	0.509**								
3. Perfectionism	0.295**	0.323**							
4. Innate ability	0.012	0.008	0.022						
5. Knowledge Creation	-0.329**	-0.111**	0.030	-0.068*					
6. Productivity	-0.408**	-0.606**	-0.151**	0.020	0.222**				
7. Stress	0.239**	0.282**	0.255**	0.000	-0.025	-0.158**			
8. Exhaustion	0.285**	0.249**	0.278**	0.057	-0.041	-0.127**	0.685**		
9. Anxiety	0.331**	0.433**	0.279**	0.042	-0.003	-0.326**	0.564**	0.615**	
10. Lack of interest	0.264**	0.299**	0.112**	0.173**	-0.198**	-0.347**	0.285**	0.319**	0.469**

Note: * $p < 0.05$; ** $p < 0.001$

Table 16. Pearson correlations between some writing conceptions and some well-being variables in the Spanish sample

	1	2	3	4	5	6	7	8	9
1. Blocks									
2. Procrastination	0.651**								
3. Perfectionism	0.386**	0.390**							
4. Innate Ability	0.263**	0.198**	0.108**						
5. Knowledge creation	-0.316**	-0.209**	0.040	-0.205**					
6. Productivity	-0.479**	-0.614**	-0.228**	-0.120**	0.261**				
7. Stress	0.265**	0.222**	0.266**	0.078*	-0.059	-0.149**			
8. Exhaustion	0.187**	0.138**	0.206**	0.014	-0.052	-0.002	0.604**		
9. Anxiety	0.337**	0.435**	0.378**	0.093*	-0.097*	-0.213**	0.544**	0.483**	
10. Lack of interest	0.320**	0.306**	0.209**	0.097*	-0.196**	-0.246**	0.288**	0.186**	0.453**

Note: * $p < 0.05$; ** $p < 0.00$

Descriptive analysis

Table 17 shows the means, standard deviations and *t*-test analyses of the scales belonging to *The Writing Process Questionnaire* for both populations. There were significant differences between Finnish and Spanish populations in all scales, except for *Innate ability*. The Spanish obtained significantly higher scores in *Perfectionism*, *Procrastination* and in *Blocks*. Instead, the Finnish population scored significantly higher in *Knowledge creation* and *Productivity*.

Table 17. Means, standard deviations (SD) and *p*-values of the writing scales in the Finnish and the Spanish populations

	Country	N	Mean	SD	<i>p</i>
Blocks	Finland	939	2.10	.75	.000
	Spain	631	2.48	.93	
Procrastination	Finland	935	2.80	.97	.000
	Spain	631	3.06	1.00	
Perfectionism	Finland	934	2.91	.91	.000
	Spain	631	3.11	.98	
Innate ability	Finland	926	2.02	.90	.473
	Spain	631	1.98	.96	
Knowledge Creation	Finland	933	4.44	.61	.000
	Spain	631	4.26	.67	
Productivity	Finland	927	2.75	.84	.009
	Spain	631	2.64	.84	

Note: significance level $p < 0.05$

In Table 18 the means, standard deviations and *t*-test analyses of the four well-being variables collected for both populations are shown. Again, significant differences were found between the Finnish and Spanish population –this time for all scales. The Spanish respondents obtained higher scores above all in *Exhaustion*, but also in *Anxiety*, *Stress*, and *Lack of interest*.

Table 18. Means, standard deviations (SD) and *p*-values of some well-being variables in the Finnish and the Spanish populations

	Country	N	Mean	SD	<i>p</i>
Stress	Finland	934	2.86	1.22	.000
	Spain	631	3.23	1.35	.000
Exhaustion	Finland	938	2.76	.95	.000
	Spain	631	3.80	.81	.000
Anxiety	Finland	938	2.74	.99	.000
	Spain	631	3.26	.99	.000
Lack of interest	Finland	938	2.21	1.10	.000
	Spain	631	2.39	1.13	.001

Note: significance level $p < 0.05$

A gender comparison within and across populations is shown for writing (Table 19) and well-being (Table 20). Concerning writing, no significant gender differences were found in the Finnish population, except for *Knowledge creation* where females reported slightly higher scores. In contrast, Spanish females reported higher scores in *Perfectionism*, *Procrastination* and *Blocks*, whereas males in *Productivity*. Comparing both populations, Spanish males scored higher in *Blocks* than Finnish males, and Spanish females scored higher in *Perfectionism*, *Procrastination* and *Blocks*. By contrast, Finnish females scored higher in *Knowledge Creation* and *Productivity*.

Table 19. Gender differences in writing within and across populations

		Finnish population				Spanish population				<i>p</i>
	Gender	N	Mean	SD	<i>p</i>	N	Mean	SD	<i>p</i>	
Blocks	Male	287	2,14	.76	.202	266	2.39	.90	.027	.000
	Female	646	2,08	.75		365	2.55	.95		.000
Procrastination	Male	287	2,82	.98	.589	266	2.95	1.01	.014	.124
	Female	646	2,78	.97		365	3.15	.99		.000
Perfectionism	Male	287	2,91	.89	.973	266	3.00	.96	.012	.218
	Female	646	2,91	.91		365	3.19	.98		.000
Innate Ability	Male	284	2,04	.91	.605	266	1.97	.92	.736	.355
	Female	641	2,01	.90		365	2.00	.98		.830
Knowledge creation	Male	287	4,34	.66	.001	266	4.28	.68	.477	.264
	Female	645	4,48	.58		365	4.24	.66		.000
Productivity	Male	284	2,71	.83	.365	266	2.72	.83	-.029	.958
	Female	642	2,77	.85		365	2.58	.85		.001

Note: significance level $p < 0.05$

Concerning well-being, no significant gender differences were found in the Finnish population. By contrast, Spanish females scored the highest in *Exhaustion*, and also in *Stress* and *Anxiety*. Comparing both populations, Spanish females scored higher in all the ill-being variables than Finnish females, and Spanish males scored higher in *Exhaustion* and *Anxiety* than Finnish males.

Table 20. Gender differences in well-being within and across populations

		Finnish population				Spanish population				<i>p</i>
	Gender	N	Mean	SD	<i>p</i>	N	Mean	SD	<i>p</i>	
Stress	Male	286	2.87	1.25	.764	266	3.04	1.37	.002	.144
	Female	645	2.85	1.21		365	3.37	1.32		.000
Exhaustion	Male	287	2.84	.97	.072	266	3.71	.83	.011	.000
	Female	648	2.72	.94		365	3.87	.78		.000
Anxiety	Male	287	2.73	1.02	.875	266	3.14	.99	.010	.000
	Female	648	2.74	.98		365	3.35	.98		.000
Lack of interest	Male	287	2.28	1.13	.209	266	2.35	1.12	.372	.474
	Female	648	2.18	1.09		365	2.43	1.14		.001

Note: significance level $p < 0.05$

4.3. Doctoral students' profiles according to their writing conceptions and psychological well-being in the Spanish population (*Study 3*)

The third objective was to study Spanish PhD students' profiles, with the aim of analyzing the relationship between writing conceptions and psychological well-being. Data analysis implied performing a cluster analysis by cases, and classifying the PhD students into subgroups in respect to the writing and well-being dimensions of the questionnaire. Before presenting the results, we remind the reader of some descriptive data from the previous section (means and standard deviations), together with scales, minimum and maximum scores, and number of cases for each variable -separately from the Finnish data (see Table 21).

Table 21. Means, standard deviations, scales, minimum/maximum values per scale, and number of cases concerning writing conceptions and psychological well-being of Spanish PhD students

Variable	<i>M</i>	<i>SD</i>	<i>Scale</i>	<i>Min./Max.</i>	<i>N</i>
Blocks	2.14	0.72	1-5	.83/4.17	631
Procrastination	3.06	1.00	1-5	1/5	631
Perfectionism	2.86	0.86	1-5	1/5	631
Knowledge Creation	4.26	0.67	1-5	1.67/5	631
Innate Ability	1.98	0.96	1-5	1/5	631
Productivity	2.64	0.84	1-5	1/5	631
Exhaustion	3.80	0.81	1-5	1/5	631
Lack of interest	2.39	1.13	1-5	1/5	631
Anxiety	3.26	0.99	1-5	1/5	631
Stress	3.23	1.35	1-5	1/5	631

After the cluster analysis three groups were labelled, according to the score means profiles, as *Exemplary*, *Survivors*, and *Hardly survivors*. The results from ANOVA tests on clustering variables show the extent to which each variable differentiated the groups (see Table 22).

Table 22. Means, standard deviations, and ANOVA results for group differences on writing conceptions and psychological well-being in Spanish PhD students

	Exemplary (194)		Survivors (185)		Hardly survivors (252)		<i>F</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Blocks	1,80 ^a	.60	1,79 ^a	.51	2,65 ^b	.62	160,26	.000
Procrastination	2,62 ^a	.87	2,45 ^a	.73	3,86 ^b	.70	225,54	.000
Perfectionism	2,43 ^a	.77	2,56 ^a	.70	3,40 ^b	.73	116,13	.000
Knowledge Creation	4,36 ^a	.64	4,36 ^a	.62	4,10 ^b	.70	11,53	.000
Innate Ability	1,89 ^a	.90	1,66 ^b	.77	2,29 ^c	1.03	26,41	.000
Productivity	2,85 ^a	.84	3,01 ^a	.73	2,20 ^b	.71	71,31	.000
Exhaustion	3,08 ^a	.69	4,21 ^b	.57	4,06 ^c	.66	177,44	.000
Lack of interest	1,87 ^a	.97	1,89 ^a	.90	3,17 ^b	.94	143,20	.000
Anxiety	2,39 ^a	.70	3,22 ^b	.81	3,96 ^c	.71	249,52	.000
Stress	1,63 ^a	.64	3,96 ^b	.78	3,93 ^b	.98	519,92	.000

Means with different superscripts (a,b,c) differ significantly ($p < .05$).

The first group (31%) together with the second group (29%) were the ones with the most adaptive writing conceptions, but unlike the second, they reported medium scores in Innate ability. Regarding psychological well-being, PhD students of the first group were the less exhausted, the less anxious and the less stressed. Together with the second group, they reported the lowest scores in Lack of interest. Considering these characteristics, participants belonging to this group were called the “Exemplary”.

The PhD students belonging to the second group (29%), apart from being the ones with the most adaptive writing conceptions, together with the ones of the first group (31%), showed even better scores in Innate ability. Although this second group of students reported -together with the first- the lowest scores in Lack of interest, they were the most exhausted, suffered from a medium level of anxiety and were -together with the third- the most stressed. Even though they showed adaptive writing conceptions, they also showed maladaptive psychological well-being. Therefore, they were called the “Survivors”.

PhD students in the third group (40%) were the ones with the most maladaptive scores in all variables of the writing dimension showing the most lack of interest and anxiety. They were -together with the second group- the most stressed, but reported lower scores in Exhaustion than the “Survivors”. This group was called the “Hardly Survivors”, as

neither their writing conceptions nor their psychological well-being are of help during their PhD process.

In these three groups we can notice that when adaptive writing conceptions are reported, psychological well-being can vary depending on the cases, but when writing conceptions tend to be maladaptive, high ill-being scores are reported (in fact, when trying a new cluster analysis with four groups, none of the resulting groups combined adaptive writing conceptions with psychological ill-being). This supports our argument in regard to a close connection between maladaptive writing conceptions and high psychological ill-being scores.

Paying attention to each profile in our three-cluster analysis, analysis regarding gender, age and fields of study were applied (see Table 23):

Table 23. Gender, age and fields of study for group differences on writing conceptions and psychological well-being in Spanish PhD students

		Exemplary (194)	Survivors (185)	Hardly survivors (252)	<i>P</i>
Gender	Male	38%	30%	32%	.001
	Female	26%	28%	46%	
Age	< 40	29%	29%	42%	.031
	≥ 40	42%	31%	27%	
Fields of study	Arts	37%	32%	32%	.006
	Science	27%	28%	44%	
Drop out thoughts	Yes	21%	29%	50%	.000
	No	45%	30%	25%	

A considerable percentage of men in the Exemplary group and of women in the Hardly survivor group can be observed. Gender differences are more balanced in the Survivor group. Consequently, it can be detected that males reported higher adaptive writing conceptions together with higher levels of psychological well-being than women.

PhD students of the age above 40 tend to be in the Exemplary group and below 40 in the Hardly survivor group. This variable is again more balanced in the Survivor group. Therefore, age seems as well to be an explanatory factor in the reporting of writing conceptions together with psychological well-being.

A considerable proportion of PhD students in Arts are in the Exemplary group and belonging to Science in the Hardly survivor group, so it seems Art PhD students report higher adaptive writing conceptions together with higher psychological well-being, whereas Science PhD students reported higher maladaptive conceptions of writing and higher psychological ill-being.

To finish, the Hardly survivor group includes more students that experience drop out thoughts, whereas in the Exemplary group we find the highest rate of PhD students without drop out thoughts.

Considering that age and field of study variables can be split in smaller subgroups - unlike gender and drop out thoughts-, we wanted to see if by going one step further we could find more precise data (see Table 24 and 25):

Table 24. Subdivision of age for group differences on writing conceptions and psychological well-being in Spanish PhD students

		Exemplary (194)	Survivors (185)	Hardly survivors (252)
Age	21-24	41%	21%	38%
	25-29	26%	30%	43%
	30-34	32%	23%	44%
	35-44	33%	40%	27%
	45-58	45%	32%	23%

$p=.010$

A considerable percentage of the youngest and the oldest PhD students were in the Exemplary group (and also in the Hardly survivor group in the case of the youngest), whereas a considerable proportion of PhD students between 25 and 34 were in the Hardly survivor group, so a big proportion of PhD students between 21 and 24 and also PhD students up to 45 are the ones that report the highest adaptive writing conceptions and levels of psychological well-being, whereas PhD students between 25 and 34 – adding part of the youngest- reported the most maladaptive writing conceptions and psychological ill-being.

Table 25. Subdivision of fields of study for group differences on writing conceptions and psychological well-being in Spanish PhD students

		Exemplary (194)	Survivors (185)	Hardly survivors (252)
Fields of study	Arts and Humanities	30%	36%	34%
	Legal and Social Sciences	44%	27%	29%
	Science	24%	32%	44%
	Health Science	30%	28%	41%
	Engineering and Architecture	31%	21%	48%

$p=.011$

Concerning the fields of study, whereas Legal and Social Science PhD students are the most *exemplary* ones, the ones belonging to Arts and Humanities are quite balanced distributed in the three cluster groups. In contrast, the three subgroups of PhD students belonging to the Science group show a clear tendency of being *hardly survivors*. This counts especially for the subgroup of Engineering and Architecture. Summarizing, PhD students in Legal and Social Science are the ones reporting higher adaptive writing conceptions and higher psychological well-being, whereas Engineering and Architecture PhD students report higher maladaptive conceptions of writing and higher psychological ill-being.

We have also considered a cluster analysis of both dimensions –writing conceptions and psychological well-being- separately in order to obtain a complementary look to the data (see Table 26 and 27):

Table 26. Means, standard deviations, and ANOVA results for group differences on writing conceptions in Spanish PhD students

Variable	Adaptive writers (226)		Medium writers (251)		Maladaptive writers (154)		F	p
	M	SD	M	SD	M	SD		
Blocks	1,51 ^a	0.40	2,31 ^b	0.53	2,78 ^c	0.63	302.73	.000
Procrastination	2,08 ^a	0.58	3,44 ^b	0.66	3,90 ^c	0.76	419.52	.000
Perfectionism	2,31 ^a	0.70	2,99 ^b	0.75	3,44 ^c	0.78	115.04	.000
Knowledge Creation	4,52 ^a	0.53	4,13 ^b	0.69	4,08 ^b	0.70	30.97	.000
Innate Ability	1,76 ^a	0.84	1,49 ^b	0.50	3,11 ^c	0.75	274.48	.000
Productivity	3,32 ^a	0.67	2,34 ^b	0.66	2,13 ^c	0.72	190.41	.000

Means with different superscripts (a,b,c) differ significantly ($p < .05$).

Table 27. Means, standard deviations, and ANOVA results for group differences on psychological well-being in Spanish PhD students

Variable	Well-being (217)		Medium Well-being (201)		ill-being (213)		F	p
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Exhaustion	3,11 ^a	0.70	4,13 ^b	0.59	4,20 ^b	0.59	199,97	.000
Lack of interest	1,99 ^a	1.02	1,67 ^b	0.63	3,48 ^c	0.73	296,61	.000
Anxiety	2,50 ^a	0.77	3,19 ^b	0.75	4,10 ^c	0.67	259,69	.000
Stress	1,69 ^a	0.65	3,91 ^b	0.78	4,16 ^c	0.83	697,12	.000

Means with different superscripts (a,b,c) differ significantly ($p < .05$).

Paying attention to these profiles in each cluster analysis according to gender, age, fields of study and drop out thoughts, the results obtained are in line with the ones shown previously (see Table 28 and 29), except for age in the writing dimension in which the results obtained are not significant:

Table 28. Gender, age and fields of study for group differences on writing conceptions in Spanish PhD students

		Adaptive writers (226)	Medium writers (251)	Maladaptive writers (154)	<i>P</i>
Gender	Male	41%	39%	20%	.027
	Female	32%	40%	28%	
Age	<40	34%	41%	25%	.084
	≥40	47%	31%	22%	
Fields of study	Arts	47%	34%	19%	.000
	Science	30%	43%	27%	
Drop out thoughts	Yes	29%	43%	28%	.000
	No	46%	34%	20%	

Table 29. Gender, age and fields of study for group differences on psychological well-being in Spanish PhD students

		Well-being (217)	Medium Well-being (201)	ill-being (213)	<i>P</i>
Gender	Male	41%	30%	29%	.006
	Female	29%	33%	37%	
Age	< 40	33%	32%	35%	.037
	≥ 40	47%	28%	24%	
Fields of study	Arts	41%	32%	27%	.019
	Science	31%	32%	37%	
Drop out thoughts	Yes	24%	31%	45%	.000
	No	49%	33%	18%	

When splitting the ages in subgroups the results obtained are still not significant for the writing dimension (see Table 30):

Table 30. Subdivision of age for group differences on writing conceptions in Spanish PhD students

		Adaptive writers (226)	Medium writers (251)	Maladaptive writers (154)
Age	21-24	24%	52%	24%
	25-29	33%	41%	26%
	30-34	33%	44%	23%
	35-44	47%	26%	27%
	45-58	49%	36%	15%

$p=.053$

In contrast, the ones obtained in the well-being dimension are in line with our first cluster analysis combining both dimensions (see Table 31):

Table 31. Subdivision of age for group differences on psychological well-being in Spanish PhD students

		Well-being (217)	Medium Well-being (201)	ill-being (213)
Age	21-24	45%	24%	31%
	25-29	30%	33%	37%
	30-34	35%	27%	38%
	35-44	38%	40%	22%
	45-58	51%	28%	21%

$p=.024$

Paying attention to the subdivision of fields of study in each dimension separately, the results are in line with our previous results (PhD students belonging to Arts are more adaptive than the ones belonging to Science, specially the Legal and Social Science group). However, referring to the Science group, there is not a clear tendency of PhD students belonging to the hardly survivor group, although it is recurrent that in the writing dimension the Engineering and Architecture group are the most maladaptive (see Table 32 and 33):

Table 32. Subdivision of fields of study for group differences on writing conceptions in Spanish PhD students

		Adaptive writers (226)	Medium writers (251)	Maladaptive writers (154)
Fields of study	Arts and Humanities	46%	31%	23%
	Legal and Social Sciences	49%	37%	14%
	Science	30%	47%	23%
	Health Science	29%	43%	27%
	Engineering and Architecture	30%	35%	35%

 $p=.000$ **Table 33.** Subdivision of fields of study for group differences on psychological well-being in Spanish PhD students

		Well-being (217)	Medium Well-being (201)	ill-being (213)
Fields of study	Arts and Humanities	33%	36%	31%
	Legal and Social Sciences	50%	27%	23%
	Science	27%	34%	39%
	Health Science	32%	32%	35%
	Engineering and Architecture	37%	28%	35%

 $p=.022$

To finish, Table 34 gives an overview of the sample collected in each of the nine possible combinations of students' profiles, combining the two cluster analysis of each dimension separately (see Table 26 and 27). In the last table, we offer an overview of each of these nine profiles according to the drop out thoughts variable (see Table 35):

Table 34. Distribution of cases according to the six profiles obtained from Spanish PhD students

	Adaptive writers	Medium Writers	Maladaptive writers
Well-being	17%	13%	4%
Medium well-being	13%	12%	7%
ill-being	6%	15%	13%

 $p=.000$

As we can see, adaptive writing conceptions tend to be linked with psychological well-being and maladaptive with psychological ill-being.

Table 35. *Have you ever considered interrupting your doctoral studies?*

	Adaptive writers	Medium Writers	Maladaptive writers
Well-being	10%	11%	3%
Medium well-being	12%	13%	6%
ill-being	7%	20%	18%
<i>p= .000</i>			

Although a low psychological well-being can definitely make PhD students decide to drop out of doctoral studies, we observe in the ill-being group that when their writing conceptions are more adaptive the idea of drop out decreases.

5. DISCUSSION

- 5.1. Discussion on the reviewed studies that collect the PhD students' perspectives**
- 5.2. Methodological and educational discussion of The Writing Process
Questionnaire in the Spanish population (*study 1*)**
- 5.3. Discussion on the cross-cultural study (*study 2*)**
- 5.4. Explanatory framework to understand writing conceptions and their link with
psychological well-being (*study 3*)**

5.1. Discussion on the reviewed studies that collect the PhD students' perspectives

The complexity of the 'Experience' construct

In our review of studies analyzing the PhD experience (either as a current process or evoking a past experience), the *experience* (as a whole or a specific aspect/s of it) - developed by doctoral candidates in their path to the PhD, from an idiosyncratic perspective- becomes the object of study. Depending on how this experience is collected (in the case of questionnaires, how the items are formulated), the registered *perceptions* might also account for *habits*, *attitudes*, *beliefs* and/or *conceptions*. Therefore, *experience* is an umbrella term that encompasses several related constructs, very often overlapping in the literature –the most controversial being *conceptions*– and still under discussion. In fact for our review of writing conceptions in section 2.2, we covered *beliefs* and *attitudes* as they provide valuable information to understand and complement graduates' writing conceptions, and also articles about *perceptions*, *experiences*, *habits*, *practices*, *difficulties*, *evaluations*, *opinions*, *impressions* and *stories* concerning writing, because the meanings of these concepts are so broad (and sometimes ambiguous) that writing conceptions are either part of them or can implicitly be detected through them.

Collecting the *experience* of PhD students becomes a useful test bed not only as a means to evaluate doctoral education. This construct can be a useful mean to analyze, for example, the socialization process of this group as the reviewed studies of Sallee (2011) and Weidman and Stein (2003) show. Even though these studies are becoming increasingly numerous, most of them use interviews. Our revision focuses on studies that use questionnaires, which at the moment are scarce. Some of the studies reviewed measure socialization not as a central aspect of their research, but as one among others (Ewen et al., 2006, 2012; Nettles & Millett, 2006), and other studies reflect on it when discussing their empirical work (Coromina et al., 2011).

Likewise, some of the reviewed studies gather the PhD experience as a means to analyze the identity construction of the PhD candidate (Haake, 2011; Larcombe et al.,

2007; McAlpine, 2012; McAlpine & Amundsen, 2011; Murakami-Ramalho, Piert, & Militello, 2008; Pearson et al., 2011). Some refer to the identity development at some point in the discussion, but they do not focus on this issue primarily (Can & Walker, 2011; de Lange, Pillay, & Chikoko, 2011; Grevholm et al., 2005; Makinen et al., 2004; Mansfield et al., 2010; Pyhältö et al., 2009; Pyhältö et al., 2012; Stubb et al., 2011, 2012).

To finish, some of the reviewed studies intertwine socialization and identity in the following combinations: examining the PhD students' socialization process in order to study their identity development (Jazvac-Martek, 2009), or measuring socialization as one aspect among others to reflect on identity development, afterwards in the discussion (Morrison et al., 2011).

All these studies have been covered in our review since they all have the same object of study –the *experience* of the PhD student-, but they pursue different objectives. Yet, the general trend of the reviewed studies - especially in large-scale studies- is to describe the status of doctoral candidates as a goal in itself (the object of study and the objective are the same), constituting an element that some authors claim should be used to measure the quality of doctoral education.

The PhD experience as an objective in itself

What does it mean to describe the status of PhD students? From the reviewed studies, it mainly means tracing –to a greater and lesser extent, and with different outlooks- the students' representation and evaluation of their PhD program and institution, their interaction with their supervisor and other colleagues, the general working climate in which they develop their research, their personal involvement and their future expectations. Additionally, certain socio-demographic and academic information is often collected as well: especially gender, ethnicity and economic funding regarding the first case (socio-demographic), and the elapsed time since their PhD began, linked to their progress, in the second case (academic). In respect to this second information, several studies aim to investigate the factors that influence the completion of doctoral

studies, which is a very recurrent matter in research, and equally attentive to the assessment of the quality of PhD studies.

To a lesser extent, large scale studies have been developed focusing on a specific aspect(s) of the candidate's PhD experience. The thesis writing experience or the psychological well-being of the candidate are proof of this: they are rarely collected on large scale, except in the case of Torrance et al. (1992, 1994) concerning writing, in the study of Jacobsson and Gillström (2006) concerning psychological well-being, and in the questionnaire for the national research project on doctoral education in Finland (Pyhältö et al., 2012), also applied in the Spanish population and in part of a Finnish sample not analyzed until the present work, addressing both dimensions. In fact, the number of small scale studies for these two dimensions is also scarce considering the whole literature: five studies for writing (Caffarella & Barnett, 2000; Larcombe et al., 2007; Aitchison, 2009; Can & Walker, 2011; Sachs, 2002), six for well-being (Holahan, 1979; Ülkü-Steiner et al., 2000; Appel & Dahlgren, 2003; Ewen et al., 2006; Ivankova & Stick, 2007; Helmers et al., 1997), and one including both dimensions (Cuetara & Lecapitaine, 1991).

Richness of data collected by the questionnaires reviewed

Some of the questionnaires reviewed, collect quite diverse and complete information not only through the large number of items and sometimes their complexity, but also through the open-ended questions, opening the possibility to obtain a more complete picture of each participant.

Most of the questionnaires reviewed offer an open-ended question at the end of their form, allowing the participant to make general comments. Questionnaires including a section of open-ended questions as an important element to consider in their analysis are comparatively scarce, mostly applied on a small-scale (Miller & Lambert-Shute, 2009; Biegel et al., 2006; Wangmo et al., 2009 applied also in Webb et al., 2009; Ivankova & Stick, 2007; Jazvac-Martek, 2009; McAlpine & Amundsen, 2011; Lovitts, 2001; Hartley & Fox, 2004; Morton & Thornley, 2001; Lee & McKenzie, 2011; Larcombe et al., 2007; Aitchison, 2009; Sato & Hodge, 2009). The questionnaires by Golde and

Dore (2001) together with the one of Pyhältö et al. (2012) –applied for this work to the Spanish population– were the only ones found in the literature collecting qualitative data on a large scale.

Taking into account that assessing the quality of universities is an inherently difficult task that requires the application of various methods and techniques, as well as international partnerships between higher education institutions (Martos, 2005; Buela-Casal, Gutiérrez-Martínez, Bermúdez-Sánchez, & Vadillo-Muñoz, 2007), it is obvious that when qualitative data is collected as well, this difficulty increases because of the complexity of analyzing open-ended questions on a large scale. Therefore, adhering to a mixed methodology becomes a great challenge that partly explains why it is scarcely applied on a large scale.

Nevertheless, some of the reviewed questionnaires not including open-ended questions collect very detailed information of the candidates' experience, showing how genuine their experiences are. In this regard, we especially highlight the large-scale questionnaire by Pearson et al. (2011). Furthermore, some of the longitudinal studies complement the use of questionnaires with additional data, coming from e.g. interviews and diary-logs, providing very detailed picture of the candidate's experience (McAlpine & Amundsen, 2011; McAlpine, 2012; Jazvac-Martek, 2009).

Electronic versus paper-based questionnaires: some dilemmas and reflections

Despite the advantages of online questionnaires, cited in the method section of this work, these authors point out as well some disadvantages, like the depersonalizing nature of mass mailing and the tendency this has to thwart respondent participation (Miller & Lambert-Shute, 2009), displaying a lower response rate than other methods, longer time periods, greater self-selection and lack of interviewer involvement (Martinsuo & Turkulainen, 2011; Miller, 1991).

The differences in the participation rates –electronic vs. paper- was very clear when the same questionnaire was filled out in both forms. On the one hand, the QNDE survey when it was filled out electronically in the study of Kim et al. (2012), had a 26.1%

response rate, but when it was filled out in paper in Miki et al. (2012) and Nagata et al. (2012), of 41.8%. On the other hand, *The International Postgraduate Students Mirror* (Jacobsson & Gillström, 2006), when filled out electronically in the Finnish, Catalan and Irish samples, had a 17.3%, 8% and 18.8% response rate respectively, whereas for the Swedish sample filled out in paper, it displayed a response rate of 72%.

These figures for online questionnaires are in line with Kaplowitz, Hadlock and Levine (2004), reporting an average response rate of 20% in internet surveys. Another example that supports this statement is the questionnaire of Martinsuo and Turkulainen (2011), filled out exclusively electronically with a response rate of 19%, or the questionnaire for the national research project on doctoral education in Finland -as analyzed in this present work-, with a response rate of 12% in the Finnish and 7% in the Spanish sample, in contrast with these other questionnaires filled out exclusively in paper (Golde & Dore, 2001: 42.3%; Chiang, 2011: 42.6%; Torrance et al., 1992; 1994: 48.2%; Nettles & Millett, 2006: 70%). An exception would be the study of Juntasopeepu et al. (2012) which obtained a response rate of 50.8% for their online questionnaire.

It seems that low response rates constitute a widespread phenomenon – regardless of the country where the study is conducted. Some of the large scale studies, in order to achieve a better response rate, sent their surveys by ordinary mail first and reminded the participants afterwards in electronic form. Despite these actions, their results are not much better: in the study of Pyhältö et al. (2012) response rate was 38.4% -also analyzed in this present work- and in Morrison et al. (2011) 45%. Another action is the one by Kim et al. (2014) when they sent the QNDE survey: they sent two follow-up letters 2 and 4 weeks after the initial e-mail, achieving a response rate of 40%. To attribute this general lack of involvement to a lack of awareness about the importance of taking part in research, seems to be –at least for the characteristics of our participants-, less feasible, as many PhD students conduct research of their own requiring human participants. Maybe for this case, the length of the reviewed questionnaires becomes more decisive for this low participation rate, which may prevent many of the PhD students to invest such time.

Responses may also vary depending on gender. Participation involvement of the reviewed studies on large scale showed that more females than males participated (Golde & Dore, 2001; Zimak et al., 2011; Barnes & Randall, 2011; Pearson et al., 2011; Miki et al., 2012 using the same sample in Nagata et al., 2012-; Kim et al., 2012; Kim et al., 2014; Juntasoepu et al., 2012; Martinsuo & Turkulainen, 2011; Pyhältö et al., 2012). It was also the case when applying the questionnaire of this last study to the Spanish population and in part to a Finnish sample, both analyzed in the present work. Contrary to this are the few studies in which male participants were predominant (Morrison et al., 2011, Torrance et al., 1992, 1994; Nettles & Millett, 2006). Although the over-representation of women only appeared in five studies (Golde & Dore, 2001; Barnes & Randall, 2011; Pearson et al., 2011; Martinsuo & Turkulainen, 2011; Morrison et al., 2011) as the rest were using representative samples, this evidence may be a first step to support that women collaborate more than men in research. We did not find any study concerning this issue.

Another disadvantage for online questionnaires that the authors point out is the lack of open-ended questions (Martinsuo & Turkulainen, 2011; Miller, 1991). We would not agree, however, with this latter weakness, as we found that more than half of the questionnaires including open-ended questions were sent online (Miller & Lambert-Shute, 2009; Biegel et al., 2006; Wangmo et al., 2009 used also in Webb et al., 2009; Ivankova & Stick, 2007; Hartley & Fox, 2004; Lee & McKenzie, 2011; Aitchison, 2009; Kim et al., 2012 also used in Miki et al., 2012, Nagata et al., 2012, Juntasoepu et al., 2012 and Kim et al., 2014; Pyhältö et al., 2012 –also applied for the Spanish population).

Impact of the reviewed questionnaires

USA and Canada are the countries displaying a greater interest and a longer tradition in studying the experience of the PhD candidates, and also the contexts where more large scale studies have been conducted. Until today, the scope of the study of Bowen and Rudenstine (1992) with more than 35.000 participants followed by the study of Barnes and Randall (2011) with 23.009, by far exceeds all other studies that have been carried out to collect the PhD students' perspectives. The third largest study, with significantly

less participants, is the inter-European one by Jacobsson and Gillström (2006) with 13.349 participants. Focusing on the European context, which is what concerns us, many studies mention the EHEA as a turning point. Therefore, it seems that there is a shared awareness of the importance of collecting doctoral candidates' experiences as a valuable tool to contribute to a more general assessment of policies, practices and doctoral programs.

However, the review conducted also shows that in practice these efforts have had little impact on educational reforms, despite numerous and diverse research documenting the experience of doctoral candidates, and despite the intention of many of these initiatives to reclaim the students' perspective as an important indicator to measure the quality of doctoral studies. Their impact has in fact not been much different than the one of the studies that evaluate PhD education based on quantitative data concerning productivity, equity and efficiency provided by universities databases and from which, from several decades ago, this observation has been done as well (e.g. Leming, 1977).

5.2. Methodological and educational discussion of The Writing Process Questionnaire in the Spanish population (*study 1*)

Reliability

The coefficients of reliability were up to .75, except for two scales scoring .65 that were considered multidimensional factors: *Perfectionism* and *Knowledge Creation*. In the case of *Knowledge Creation*, as it was mentioned, this scale did not work very well for the Spanish population in its original form (*Knowledge Transformation*), as the items loaded in two factors. The fact of including three items in a factor, instead of the original six, could explain why this factor is affected negatively in its reliability. In the case of *Perfectionism*, it is a scale that in general was also not working excellent within its original sample ($\alpha=.68$). But, again, the fact that this factor originally includes four

items, but for the Spanish population only three –as one of them moves to *Blocks*–, probably affected the reliability of the factor negatively.

Except for the two aforementioned scales, scores were very similar to the ones of the original non-Spanish population, differentiating only in two or three scores. The scale with more distance from the original sample was *Knowledge Creation*, scoring .65 versus the .71 in its original *Knowledge Transformation*.

Factorial analysis

The fact that the original *Knowledge Transformation* factor split in two different factors for the Spanish population could be explained from a conceptual point of view, because of the double dimensionality that measures this factor in its original form, as it was mentioned. The items that did not work for the Spanish population refer to a conception of writing as an activity that transforms knowledge: the actions of others help us to write and rewrite our text, either in a direct way through their comments and observations, or in an indirect way when we as writers put ourselves in the place of the reader wondering if our text would be understood. On the other hand, the items that worked for the Spanish population stand out writing as a form of creating.

As mentioned before, the only item from the factorial structure that loaded in a different factor than originally, was “Writing is difficult because the ideas I produce seem stupid”. An explanation for this could be that although in its original form it characterizes a very perfectionist writer, it could, at the same time, be a prototypic attitude shown by a writer feeling blocked (“Writing is difficult because the ideas I produce seem stupid [I can’t produce good ideas]”) or a personal interpretation to justify blocks in writing (“Writing is difficult [it blocks me]because the ideas I produce seem stupid”).

Convergent and discriminant validity, educational implications and future research

The target population reported the highest scores for *Knowledge Creation*. As PhD students, it makes sense that their conceptions of writing correspond with a complex

and sophisticated conception of writing, as an activity in which they create knowledge, far from a reproductive conception of writing. Accordingly, this sample reported the lowest scores in *Innate Ability*, being far from a simplistic conception of writing. The discriminant validity of these two factors showed that conceiving writing as a creative activity was negatively related to conceiving writing as an innate ability. For future research, it could be interesting to collect and analyze more dimensions to measure how PhD students conceive writing in terms of simple to more complex conceptions.

The rest of the variables showed medium scores and low standard deviations, meaning the participants tend to reply very close to the mean. More research should be done to complement these results, for example collecting qualitative data through interviews. However, through the convergent and discriminant validity of the factors, it is shown that getting blocked, postponing writing, being very critical and perceiving writing as an innate ability hinder productivity, but when writing is conceived as a creative activity, PhD students perceive themselves to be more productive and the problems with blocks, postponing and perceiving writing as an innate ability decrease (except for being very critical, which was the only problem in writing for which we did not find correlations with the conception of writing as an innate ability). It would be interesting to explore this result in greater depth.

Regarding gender differences, female PhD students scored significantly higher in maladaptive writing conceptions (*Procrastination* and *Perfectionism*) and male PhD students in adaptive writing conceptions (*Productivity*). More studies need to be done in this line to see if females generally adopt more maladaptive writing conceptions, which not necessarily have to affect the quality of their final written text, but it is likely that they affect their writing process, making it more difficult and emotionally demanding.

Strengths and weaknesses of the instrument

An instrument like *The Writing Process Questionnaire* can be a very useful tool to reflect on writing, the problems students face and the strategies they use. Therefore, although this instrument is focused on writing conceptions, it can be a starting point not only to help students in making their conceptions become more adaptive, but also to

implement more adaptive and diverse writing strategies, thereby mediating new learning.

It has, however, some methodological limitations. Although our quantitative measurements were generally reliable, two scales were less than optimal because the number of items was reduced from its original version. This is a general problem of the instrument which includes a small number of items per scale (e.g. *Innate Ability* only includes two items). This was a way to make the questionnaire shorter, but also a risky decision for the reliability of the instrument. Even so, when comparing it to the reviewed instruments concerning writing conceptions, which are very few to date, it appears to be a very complete instrument. Moreover, considering it is not a psychological test, the two not very good scales may be regarded at least satisfactory. According to Fishman and Galguera (2003), interpretation of reliability may be dependent on test purposes; for tests that are primarily research rather than decision-making tools, reliabilities may be less critical.

In conclusion, there is good evidence that the questionnaire with the adjustments mentioned is a reliable tool to capture some essential aspects of the academic writing process at the PhD level in the Spanish population. Future research should aim at validating this tool in the Spanish context (also its Catalan version).

5.3. Discussion on the cross-cultural study (study 2)

The Writing Process Questionnaire as a cross-cultural instrument

In Study 1 the exploratory factor analysis of *The Writing Process Questionnaire* for the Spanish population showed the same factorial structure validated for the Finnish population (see Lonka et al., 2014). Only the original *Knowledge transforming* scale needed to be modified, shortened it to *Knowledge Creation* by deleting three items, and moving one item from *Perfectionism* to *Blocks*. Since the questionnaire is not a psychological test, the alphas for the scales were good in both countries. The factors

with reliability measures below .70 (*Blocks* for the Finnish, *Knowledge Creation* for the Spanish and *Perfectionism* for both populations) corresponded to the three constructs of the questionnaire measuring more than one dimension. By contrast, *Procrastination*, *Innate ability* and *Productivity* appeared to be more one-dimensional constructs and therefore more readily to retain coherence.

In short, the previous study sustained that the structure of the instrument confirmed in Lonka et al. (2014) could be generalised with only minor adjustments. There is good evidence that *The Writing Process Questionnaire* can be a reliable and valid instrument to measure PhD students' writing conceptions in both countries and in the three languages (Finnish, Spanish and Catalan). In the present study, after deleting the four items with differing loadings for both populations, a cross-cultural study was conducted. Considering these adjustments for the comparative analysis, three scales worked better in the Finnish and two in the Spanish sample, but the theoretical constructs were the same in both countries. The next step should be to proceed to the validation of *The Writing Process Questionnaire* in the Spanish population to confirm the cross-cultural validity of the instrument.

Correlations within and among scales - inside and across countries

Results showed that adaptive conceptions about academic writing were linked to psychological well-being and maladaptive to ill-being. Specifically, the ill-being variables -*Stress*, *Exhaustion*, *Anxiety*, *Lack of interest*- correlated positively with factors measuring maladaptive writing conceptions -*Blocks*, *Procrastination*, *Perfectionism*-, except *Innate ability* (it only correlated positively with *Lack of interest* for both populations plus *Stress* and *Anxiety* for the Spanish), and negatively with these two factors measuring adaptive writing conceptions: *Productivity* (except *Exhaustion* in the Spanish population) and *Knowledge creation* (although this last one only with *Lack of interest* for both populations, plus *Anxiety* for the Spanish). A discussion of these findings follows:

Blocks: its correlation with *Lack of interest* is supported in the literature (Gute & Gute, 2008), partly with *Anxiety* (they may correlate in some occasions, while not in others

(Cohen, 1998) and not for *Stress* (all PhD students, independently from the blocks experienced, displayed high levels of stress, (Hagerman-Muller, 1986)). For *Exhaustion* no studies were found. Future research should test in which conditions anxiety can manifest into a writer's block and also if higher levels of stress can lead into more blocks in writing. From these correlations, it seems that anxiety is a "less desirable" emotion -as it is discussed in *Study 3*- more likely to block learning than stress. It would be interesting to test this hypothesis and to explore the influence of exhaustion in blocks, considering the positive correlations found with procrastination, perfectionism and productivity. From a cross-cultural point of view, it would be interesting to find out why blocks' correlation with exhaustion was stronger for the Finnish population, and the opposite for stress, anxiety and lack of interest. In fact for the next variables this pattern was followed most of the time. It seems that Finnish peoples' problems with writing were more connected to exhaustion and for Spanish with lack of interest, anxiety and stress.

Procrastination: its correlation with all the psychological ill-being variables is supported in the literature. For *Stress* an extensive literature was found, but in other fields than writing (Tice & Baumeister, 1997; Jackson et al., 2000; Sirois & Tosti, 2012; Flett et al., 2012). The majority of studies were found in relation to *Anxiety* (Onwuegbuzie, 2004; Fritzsche et al., 2003; Beswick et al., 1988; Flett et al., 2012) –most of them outside writing (Schraw et al., 2007; Speirs-Neumeister, 2004; Alexander & Onwuegbuzie, 2007; Rothblum et al., 1986; Haycock et al., 1998; Rodarte-Luna & Sherry, 2008; Hayashi, 2009; Grunschel et al., 2013; Van Eerde, 2003; Spada et al., 2006) some of which did not find correlations (Steel, 2007; Lay & Silverman, 1996). For *Exhaustion* and *Lack of interest* few studies outside the writing field were found (Ferrari & Thompson, 2006; Cao, 2012; Lee, 2005), except for Gute and Gute (2008) within writing. Taking into account that for the first two emotions more literature was found, it seems that the task aversiveness that procrastinators experience (Steel, 2007) may be more linked -considering the core affect model (e.g. Yik, Russell, & Barrett, 1999; Yik, Russell, & Steiger, 2011)- to bad-energetic feelings than to bad-drowsy ones. Generally speaking, it would be interesting to translate the insights found concerning procrastination in the writing field to check if writing procrastination can be associated with high levels of stress, exhaustion and lack of interest. Lastly, it would be interesting

to find out why its correlation with stress and exhaustion was stronger for the Finnish, and anxiety and lack of interest for the Spanish population. In this case, stress does not follow the pattern displayed with most of the variables. More research should be conducted in this line.

Perfectionism: it has been extensively documented in the literature, finding positive correlations, with *Stress* (Nilsson et al., 2008; Ashby et al., 2012; Park et al., 2011; Chang, 2006; Rice et al., 2006; Chang et al., 2004; Chang & Rand, 2000), *Exhaustion* (Chang et al., 2011; Childs & Stoeber, 2012; Mitchelson & Burns, 1998; Gotwals, 2011; Azizi & Nikbakhsh, 2013) and *Anxiety* (Moore, 2010; Onwuegbuzie & Daley, 1999; Blankstein, 2000; Gregersen & Horwitz, 2002; Eum & Rice, 2011; Gnilka et al., 2012), except for one study within anxiety (Yondem, 2007). Correlations were not found with *Lack of interest* but with its opposite (Korajlija et al., 2003; Chi et al., 2012; Zhang et al., 2007; Mills & Blankstein, 2000; Speirs-Neumeister, 2004; Miquelon et al., 2005). None of the studies found were within writing (except Moore, 2010) considering it is an activity in which students very easily become perfectionists, striving to obtain a finished product that satisfies them. Future research should investigate how all these psychological well-being factors conjugate on the perfectionist writer and test out if the results obtained support our findings. It would also be interesting to study why its correlation with exhaustion was again stronger for the Finnish and, by contrast, with anxiety, lack of interest and stress for the Spanish population.

Innate ability: no studies in the literature were found relating the conception of writing as a skill we are born with, with any of the psychological well-being factors we tested for our study. Research may attend this gap to check the repercussions of this writing conception in the students' learning and his psychological well-being, especially with *Lack of interest* that correlated positively for both populations (stronger for Finnish) and *Anxiety* and *Stress* for the Spanish. From the first correlation found in both cultures, it can be said that PhD students showing convictions that writing is an innate ability show higher lack of interest towards writing.

Productivity: its negative correlation with *Exhaustion* (only for the Finnish population), *Anxiety* and *Stress* were supported in the literature (Nayeri, et al., 2009; Taris &

Schreurs, 2009; Bandura, 1988; Bembenuddy, 2009; Lavasani et al., 2011; Díaz et al., 2001). Regarding *Lack of interest* no studies were found, but for its opposite (motivation/ task interest/ engagement) correlations were found (Aguilar et al., 2001; Erez & Judge, 2001; Hackett & Campbell, 1987; Salanova et al., 2011; Galyon et al., 2012), except for two studies (Vancouver & Kendall, 2006; Spence & Usher, 2007). Most of the studies considered self-efficacy as an equivalent measure of perceived productivity. No studies were found inside the writing field. Future research should fill this gap studying the sense of productivity in writing (and also productivity as an objective measure) and its connection with the learner's psychological well-being, to analyze aspects that can help and constrain the writing flow. Especially concerning exhaustion, it would be interesting to find out why these two factors did not correlate for the Spanish population. It might be that the exhaustion levels were generally so high for the Spanish that they did not pose an obstacle for productivity. It would also be interesting to study why productivity's correlation with the other ill-being factors was stronger for the Finnish than for the Spanish population. The pattern here makes sense with the other results: this adaptive conception of writing was less related to lack of interest, anxiety and stress for the Finnish than for the Spanish.

Knowledge creation: no studies were found in the literature relating this conception of writing -as an activity that develops thinking- with any of the psychological well-being factors tested for our study. Research may go in this direction to see if the development of this writing conception has some connection with students' psychological well-being, especially with *Lack of interest* that correlated positively for both populations and with *Anxiety* for the Spanish. Lack of interest in one's own research (and probably feeling anxious) could be a big obstacle for creating knowledge. Feeling stressed and/or exhausted does not necessarily have to be an obstacle, which makes sense with the classification of more and less desirable emotions discussed in *Study 3*.

Besides, correlations within the writing scales in the two populations give evidence to the fact that adaptive conceptions about academic writing (*Knowledge creation*, *Productivity*) correlated positively with each other and the same for maladaptive conceptions (*Blocks*, *Procrastination*, *Perfectionism*, *Innate ability*) –although the last

one not for the Finnish population. It would be interesting to deepen why for Finnish the innate ability conception did not relate with other problems in writing, but it did for the Spanish. We wonder if this is a sign of more mature ideas about writing by Finnish.

Further, these two groups of conceptions –adaptive and maladaptive- correlated negatively with each other except *Perfectionism* for *Knowledge Creation* and partly *Innate ability* for *Productivity* (this last one only for the Spanish population). The first exception makes sense since the fact of being perfectionist can be a stimulus to be more creative, although no positive correlations were found. The second exception reminds us once more of the probability that Spanish students may feature slightly more immaturity in writing. It would also be interesting to deepen why the correlations within writing were stronger for the Spanish population.

Some of these correlations were supported in the writing literature (*Procrastination-Perfectionism*: Onwuegbuzie, 2004; *Blocks-Perfectionism*: Henning, 1981; *Procrastination-Blocks*: Boice, 1996; *Productivity-Procrastination*: Pajares et al., 2000), but predominantly outside writing (*Procrastination-Perfectionism*: Solomon & Rothblum, 1984; Onwuegbuzie, 2000; Onwuegbuzie, 1997; Brownlow & Reasinger, 2000; Flett et al., 1992; Flett et al., 2012; Speirs-Neumeister, 2004; Chi et al., 2012; Ferrari, 1992; *Productivity-Perfectionism*: Mills & Blankstein, 2000; *Productivity-Procrastination*: Klassen et al., 2010; Klassen et al., 2009; Klassen & Kuzucu, 2009; Klassen, Krawchuk, Lynch et al. 2008; Wolters, 2003; Ferrari et al., 1992) – it would be interesting to test these in writing.

Future research should also test the following correlations from our study for which no literature was found: *Blocks-Productivity*; *Knowledge Creation* as well as *Innate ability* with the rest of the writing variables respectively. Especially *Knowledge Creation* and *Innate ability* correlated negatively with each other in both populations, leading to the reflection that PhD students with convictions that writing is an innate ability will experience more difficulties to create knowledge (it seems that both could be part of the same category - forming the extremes of the spectrum to describe one aspect of writing conceptions). Another reflection is that *Knowledge creation* in both populations correlated with the rest of the writing variables except with *Perfectionism*. It seems that

perfectionism does not hinder knowledge creation, but in an extreme form it may not help in the flow of writing.

Lastly, we did not search for studies supporting the positive correlations found within the well-being scales, as it was not the purpose of our study to test these emotional variables exclusively. From our results, special attention deserves the *Stress-Exhaustion* correlation which was very significant for both populations, and the fact that all correlations were stronger for the Finnish population (except for *Lack of interest-Stress*, slightly stronger for the Spanish). It would be interesting to explore these findings further.

Writing conceptions and psychological well-being for Finnish and Spanish PhD students

As we mentioned in the results, significant differences were found between both populations. On the one hand, the Spanish obtained higher scores on maladaptive writing conceptions (*Blocks, Procrastination, Perfectionism*), whereas the Finnish on adaptive writing conceptions (*Knowledge creation, Productivity*). *Innate ability* was the only factor for which no significant differences were found. On the other hand, Spanish students got higher scores in all ill-being variables (*Stress, Exhaustion, Anxiety, Lack of interest*), *Exhaustion* being the most striking one. By these results the Spanish population seems, at least at first sight, to experience the writing of the thesis with more obstacles and also to suffer more emotionally. If we add the fact that 59% of Spanish PhD students had considered dropping out their PhD at some point of their doctoral process versus the 45% for Finnish, this reinforces this conclusion. However, these results are not easy to explain.

Qualitative analysis on the reasons why students in our sample had –at some point of their PhD process– considered the idea of dropping out could help to develop a consistent explanation. Analyzing their working conditions could also give us some clues. In this concern, Spanish students apparently had more time to conduct their dissertations: 67.4% of them worked full-time on their PhD, whereas only 49% of

Finnish students did. However, the time invested to the thesis was qualitatively different. Most Finnish PhD students (78.3%) worked alone in their thesis, whereas in Spain it was the case for half of them (51.9%) as nearly the other half (41.5%) worked both alone and in a group. This last situation –working alone and in a group–, only affecting 10.8% of the Finnish students, seems likely to be more stressful and more intensive (workload) than the other two ways of developing a thesis (alone or in a group). Qualitative research on the perceptions that the participants have about their thesis work structure (alone, in a group and both) should be conducted in order to better understand the differences in the characteristics of these learning contexts for both populations. Besides, it would be interesting to interview PhD students on their writing experiences, which was an aspect not included in any of the open-ended questions of our survey.

Individual differences between the two groups could also explain the different scores for writing and well-being. Firstly, whereas mean age for the Spanish population was 31.5, it was 36.6 for the Finnish. The fact that Finnish students are older when they start a PhD could help explain the results – facing the PhD with more maturity than Spanish students. Secondly, whereas the Spanish data was collected with a balanced distribution of the participants' disciplines, this was not the case for the Finnish data: 41.2% of the students were from Arts and Humanities. This could influence the results as well. It could be that students from these areas take the thesis more like a hobby, explaining thus the more adaptive results for the Finnish. Stubb et al. (2012) suggested that in some small disciplines within the faculty of humanities, especially part-time doctoral students and older students, may engage themselves in doing thesis as a hobby. The fact that these students more often work in a dyadic student-supervisor relationship, as supported in Stubb et al. (2012), could also explain the more adaptive results versus the mixed – alone and in a group- thesis work structure in line with our explanations of the learning environment. Thirdly, another factor that could explain better results for the Finnish is that around 35% were not in an advanced process of their PhD, whereas all Spanish students were in their research period. These beginner students could have had more optimistic perceptions of the PhD process (being partially unaware of the entire process), leading to more adaptive scores.

In any of the cases mentioned –whether the differences focus on the learning context or on individual features- it would be interesting to equilibrate the samples in order to make better comparisons and see if –by controlling some variables–this gives us a different variation of results. It would be interesting to compare both samples with a more balanced distribution on the working research status, comparing students within a specific interval of ages, delimitating the sample in a specific field of study, focusing only on advanced research students and with a more balancing rate of dropouts.

If doing this, variations within populations are not so remarkable, these analyses can be an interesting contribution in the study of variable/s that can promote a more adaptive (or maladaptive) development of PhD studies. For example, if future studies find that because Finnish students typically work outside academia before they start doing a PhD -starting a PhD at an older age than the Spanish-, they are more successful in conducting PhD studies, it could promote thinking and enable reforms for the curriculum planning and organization of PhD studies. Possible explanations for starting their PhD at a later age could include the funding system (maybe people want to earn more after graduating before they go back to lower salaries that PhD students get), or wanting to gain some experience before starting research.

Another variable that could have affected the variation of results, is the time of the data collection. The Finnish sample was collected four years and a half before the Spanish sample. In Spain there was a better general social and economic situation in 2006-2007 as compared to 2011, when the Spanish data was collected. It is likely that this could influence the data, explaining some remarkable differences between both populations.

Other interpretations to explain the variability of results, especially concerning exhaustion and productivity, have to do with cultural habits and life style. The Spanish Congress of Deputies has recently approved a report by the Parliamentary Subcommittee to study schedule streamlining. The document states that modifying the current time zone and adapting it to the UK and Portugal, would favor the organization of our habits, increasing productivity of workers and students (*Boletín Oficial de las Cortes Generales*, [Official Gazette of the Parliament] 2013). Current work timetables in Spain –often split between morning and evening, including long lunch breaks–are not

very helpful as people work until very late, in comparison to other central European and Nordic countries, where people have short, but intensive timetables. Meal timing also follows these work timetables. Therefore, Spanish people have dinner very late and then go to sleep very late as well. In a study by Tynjälä, Kannas and Välimaa (1993) Spain was the country with the latest bedtime for children and teenagers. The Finnish have dinner much earlier and therefore go to sleep earlier. The cold climate and lack of light hours in the winter may contribute to this. However, studies regarding the quality of sleep were not found to support that Finns sleep better than Spanish. In fact in some European comparative studies Finnish are specially highlighted for having bad quality sleep, especially in summer time, at childhood and adolescence (Tynjälä et. al., 1993), and adulthood (Ohayon & Partinen, 2002).

Another interpretation that could help to explain the contrasts in the results could be linked to the personality of the participants. Maybe Spanish people exaggerated their perceptions and emotions when they had to show their position/point of view from a five Likert scale items and Finnish were more reserved in answering (or dramatizing). Anyway, if that was the case, Spanish students would in any case be expressing “the way they think” and “the way they feel”, which would be interesting to test as it could affect their performance and scientific production. Therefore, these more maladaptive results should be addressed in the Spanish context guiding PhD students, although a lot of variables (economical, sociological, etc.) would mediate these results as well. Roughly, through “this way of thinking” (analysing the writing variables), we can indirectly get a picture of their lower self-perception as writers, linked to a lower self-efficacy perception than Finnish PhD students. Complementarily, “this way of feeling” (testing the well-being variables) could contribute to a lower self-esteem in comparison to the Finnish.

Gender differences in the writing conceptions and psychological well-being of Finnish and Spanish PhD students

a) Within populations

Within the Spanish population, females were the ones with higher maladaptive scores in writing (*Blocks, Procrastination and Perfectionism*) and in well-being (*Stress, Anxiety and Exhaustion*). Spanish males got higher adaptive scores in *Productivity*. For *Knowledge Creation, Innate Ability and Lack of interest* significant differences were not found. In contrast, within the Finnish population gender differences were not found in writing (*Blocks, Procrastination, Perfectionism, Innate ability and Productivity*) -except for *Knowledge Creation* where females scored more adaptively- and neither in well-being (*Stress, Anxiety, Exhaustion and Lack of interest*).

Some of these maladaptive variables are seen to be more predominant for females in the literature. These studies -applied outside the writing field with university students- support our results for the Spanish population: Eum and Rice (2011) found that in exam situations women were maladaptively perfectionistic and more likely to be highly test anxious; Brownlow and Reasinger (2000) revealed that low extrinsic motivation, coupled with perfectionism (for women in particular) and an external locus of control and attributional style, contributed to the tendency to delay school tasks; Rothblum et al. (1986) found out that high procrastinators, particularly women, were significantly more likely than low procrastinators to report more test anxiety, weekly state anxiety, and weekly anxiety-related physical symptoms. These studies also show that maladaptive variables are connected with perceived ill-being, in the same way as the results for female Spanish students show. However, this is only one tendency. In Klassen et al. (2009) girls rated their negative self-esteem and test anxiety higher than boys, but boys reported higher levels of procrastination and lower levels of self-efficacy for self-regulation.

Several reasons have been argued to explain why females generally adopt more maladaptive conceptions. Their perfectionism is attributed to higher fear of failure (Flett et al., 1992; Brownlow & Reasinger, 2000) and to higher levels of anxiety (Moore,

2010). Additionally, their procrastination is associated to significantly lower scores on self-control and higher scores on anxiety (Rothblum et al., 1986), as well as to higher fear of failure (Solomon & Rothblum, 1984), which is likely to be the basis of such anxiety in women (Rothblum et al., 1986). For our study we did not measure fear of failure or self-control to corroborate these results, and instead the collected data, for example concerning working conditions, did not contribute to explain our differentiated gender findings for well-being in the Spanish population (full-time dedication: $m=64\%$, $f=70\%$, half-time dedication: $m=36\%$, $f=30\%$, $X^2=0.080$; individual work: $m=55\%$, $f=49\%$; in a group: $m=5\%$, $f=8\%$; both: $m=40\%$, $f=43\%$, $X^2=0.294$).

In fact, maladaptive variables were not always found to be predominant in females. In the study of Klassen and Kuzucu (2009) with secondary students, no gender differences were found in levels of procrastination. Neither Villalón et al. (in press) found no gender differences regarding writing self-efficacy with high school students. These findings support the results for the Finnish population. Indeed, other studies support the opposite, reporting higher levels of procrastination and lower levels of self-efficacy for self-regulation in males as it was mentioned in Klassen et al. (2009). In respect to psychological well-being, also some studies in the literature do not support that females experience more distress and more dissatisfaction with their overall postgraduate experience than males: in Ülkü-Steiner et al., (2000) no differences were found when measuring stress. This result supports our findings for the Finnish population. Also in Stubb et al. (2011) differences were not found except for exhaustion, reporting higher scores for males. Therefore, speculations on our findings require caution, considering also that some of the studies on well-being in writing (writing anxiety) have not found gender differences (Pajares, Miller, & Johnson, 1999; Scott & Rockwell, 1997; Moore, 2010).

The literature also shows that if maladaptive variables are analyzed from an adaptive perspective, ill-being decreases. In Moore (2010), an interaction between gender and active perfectionism showed that, among female secondary students, mathematics anxiety decreased as a function of increased active perfectionism. However, it was also sustained that this effect was not present for writing anxiety. Gender stereotypical attitudes were used to explain why this interaction effect was present for mathematics

and not for writing. In our study we measured perfectionism as passive. Otherwise, it would have been interesting to test this relationship and check if gender results would have been in line with these findings.

Concerning the adaptive variables measured in our study, in respect to *Knowledge Creation* the literature is in line with the Finnish results, with females obtaining better scores than males: Spanish females from secondary education and university tended to hold more sophisticated views of writing than their male peers (Villalón & Mateos, 2009; Villalón et al., in press). However, in our Spanish sample no significant differences were found. Complementary research should be conducted to explain the seemingly contradictory results in these two Spanish samples. In respect to *Productivity*, the Finnish findings -showing not significant gender differences- support the literature: taking the sense of one's own productivity as an important part of self-efficacy, Hackett and Campbell (1987) –outside the writing field- were not successful in supporting the hypothesis that the sex linkage of the task significantly influenced gender differences in self-efficacy. In fact, Vieira and Grantham (2011) suggested that before males engage in challenging goal attainment they must perceive themselves as self-efficacious, whereas females are inspired by tasks that are important to them -if the tasks are important, by implication, so are the goals, notwithstanding their difficult nature. No literature was found to support the Spanish findings where males got better scores. Indeed, it was found that in secondary education boys reported lower levels of self-efficacy for self-regulation than girls (Klassen et al., 2009; Klassen & Kuzucu, 2009).

It would be interesting to conduct a correlation analysis of all our variables considering gender in order to explain some distinct patterns for males and females and test, for example, if self-efficacy is a stronger predictor of procrastination for girls than for boys (Klassen & Kuzucu, 2009), or if perfectionism is a stronger predictor of procrastination for women (Brownlow & Reasinger, 2000) or for men (Flett et al., 1992). By doing this, we would not only obtain more distinct patterns for males and females that could be transferred across cultures, but above all a deeper understanding of gender in the two societies studied. From our analysis, it is important to note that within the Spanish sample, females were generally the ones scoring worse than males, whereas within the Finnish sample, no differences were found and even for one variable the opposite

pattern was observed. The balanced results for the Finnish sample could be explained by the role and status of Finnish women in their society: equalitarian aspects (the welfare system is a good example) have had an effect on men and women from a cultural point of view (Castells & Himanen, 2003; Lewis, 2005); in terms of e.g. expressiveness and personality, women are often conceived “stronger”, as it is frequently stereotyped in guides about the Finnish culture. By contrast, the results for the Spanish sample –where females scored more maladaptive than males- could mirror a society in which discriminating attitudes towards women are still present –as emerged in some of the answers of the open-ended questions not analyzed for the present dissertation–, although a lot of actions have been carried out to gain equality (the lack of significant differences concerning working conditions mentioned is a little proof of that). More concise research needs to be conducted in order to better support these interpretations.

b) Across populations

Comparing the Finnish and the Spanish population, Spanish males had higher maladaptive scores in *Blocks* than Finnish males, while Spanish females got higher maladaptive scores in *Blocks*, as well as *Procrastination* and *Perfectionism* than Finnish females. Finnish females, instead, got higher adaptive scores in *Knowledge Creation* and *Productivity*. For *Innate ability* no significant differences were found across females or males. Neither, significant differences were found for *Procrastination*, *Perfectionism*, *Knowledge Creation* and *Productivity* between Finnish and Spanish males. Concerning well-being, Spanish males got higher maladaptive scores in *Exhaustion* and *Anxiety* than Finnish males, and Spanish females scored more maladaptive in all the ill-being variables (*Stress*, *Anxiety*, *Exhaustion* and *Lack of interest*) than Finnish females. For *Stress* and *Lack of interest* no significant differences were found across males.

It is remarkable that Spanish females got higher maladaptive scores than Finnish females in nearly all the variables. Comparing the role and status of women in these two societies would contribute to a more clear explanation of these results. From our data, although more Spanish females dedicated full-time to their dissertation (*Spanish females: 70% versus Finnish females: 52%*), a big proportion of them were doing their

thesis both individually and in a research group (*Spanish females*: 43% versus *Finnish females*: 12%). Concerning males, the fact that no significant differences were generally found except for these three variables -blocks, exhaustion and anxiety-where Spanish males scored more maladaptively than Finnish males, would also deserve a careful study across cultures. Again, from our data, more Spanish males dedicated full time to the PhD (*Spanish males*: 64% versus *Finnish males*: 47%), but a big amount of them were doing their thesis both individually and in a research group (*Spanish males*: 40% versus *Finnish males*: 9%).

Few studies focus on differences across cultures, even though an extensive body of evidence highlights the importance of investigating students' conceptions –for example motivation beliefs (Boekaerts, 2003)- in diverse cultural settings. An example of a cross-cultural study is Klassen et al. (2009), showing that Singaporean adolescents reported higher levels of procrastination and lower levels of self-efficacy for self-regulation than Canadian adolescents. Comparing these findings with ours, some hypothesis could be drawn around some commonalities between the countries with higher adaptive scores in the two studies and the countries scoring more maladaptive. Heine (2004) and Park and Huebner (2005) supported that Western participants very often rate positive personal attributes higher than East Asian participants. But what happens when only comparing Western participants, like in our study? The lack of literature makes it necessary to further replicate the current analysis in more diverse samples to provide more conclusive evidence.

It seems to be more consistent in the literature that the variables measured are common for learning and very likely universal. Ferrari, Díaz-Morales, O'Callaghan, Díaz and Argumedo (2007) –exploring adult procrastination in Australia, Peru, Spain, United Kingdom, United States, and Venezuela– found that procrastination was common in each of the settings, and that arousal and avoidant procrastination patterns showed cross-cultural similarities rather than differences. In Klassen et al. (2009) it was the same in the two contrasted settings, adding strength –according to Klassen and Kuzuku (2009)- to the universality of social cognitive theories of motivation. The increasing globalization may reduce cultural distinctions in different settings (Arnett, 2002). However, future research should investigate how these variables operate as

psychological constructs in diverse contexts by using a cross-cultural framework and moving beyond undergraduate students from culturally Western settings, which are the two common characteristics of participant' profiles in most of the studies reviewed.

Research across settings should also contemplate gender differences. Few cross-cultural studies were found including gender comparisons. In Klassen et al. (2009) both Canadian and Singaporean boys reported higher levels of procrastination and lower levels of self-efficacy for self-regulation than Canadian and Singaporean girls. Self-efficacy seems consistent for Asian participants (Klassen & Kuzucu, 2009; Klassen & Georgiou, 2008), as well as across cultures (see Else-Quest, Hyde, Goldsmith, & Van Hulle, 2006). However, Hackett and Campbell (1987) found no significant differences with North American participants. This result is in line with our findings for the Finnish population, but the opposite pattern was found for the Spanish.

In this same study, procrastination was related to self-efficacy: both Canadian and Singaporean adolescents, with high levels of confidence to regulate their learning, were less likely to report high levels of procrastination. This was also tested with Canadian participants for both females and males (Klassen, Krawchuk, & Rajani, 2008) as well as with our Finnish and Spanish participants. We also found that high levels of self-efficacy were not always a guarantee for low levels of procrastination, as it was found in Klassen and Kuzucu (2009) with participants from Turkey. Further, the fact that males procrastinate more than females does not seem to be consistent in all settings: no differences were found with Turkish participants (Klassen & Kuzucu, 2009), neither in our study with Finns, and the opposite pattern was found with North American participants (Rothblum et al., 1986) and with our Spanish participants. While this evidence may not be enough to establish conclusions regarding gender and territories, it is important to note that Spanish females scored worse than Spanish males for both variables. Spain is the only territory mentioned in which this takes place.

For the perfectionism variable, the two studies reviewed found that females were more perfectionists. Both of them were conducted with North American participants (Eum & Rice, 2011; Brownlow & Reasinger, 2000). Our results for Spanish participants go in this line, but for Finnish no significant differences were found. It seems that both

Spanish and North American females are similar in scoring more maladaptively than males (not only regarding perfectionism, but also regarding procrastination as mentioned in the previous paragraph).

Concerning Knowledge creation, our Spanish participants showed no significant gender differences, but our Finnish females scored higher. The fact that in Villalón and Mateos (2009) and Villalón et al. (in press) Spanish males obtained lower scores should not be considered inconsistent with our results, considering that the items used in these studies are difficult to equilibrate.

Studies on well-being found that females were more anxious than males in North America (Rothblum et al., 1986; Eum & Rice, 2011), Australia (Moore, 2010), Canada and Singapore (Klassen et al., 2009) and Spain in our study. Gender differences were not found in Finland (Stubb et al., 2011; the present study), but also in North America (Pajares et al., 1999; Scott & Rockwell, 1997) and Australia (Moore, 2010). In these last two settings anxiety was measured in respect to writing, whereas the other studies – obtaining the opposite pattern– were in respect to tests and mathematics. It seems that gender stereotypical attitudes are certainly present and might explain some of these differences. Fear of failure was also a consistent finding -females obtaining higher scores than males- in North America (Solomon & Rothblum, 1984; Brownlow & Reasinger, 2000) and Canada (Flett et al., 1992), and the same with negative self-control (North America: Rothblum et al., 1986) and negative self-esteem (Canada and Singapore: Klassen et al., 2009).

For stress no significant differences were found in North America (Ülkü-Steiner et al., 2000) or Finland (Stubb et al., 2011). This is in line with our findings regarding the Finnish sample, but not with the ones from the Spanish where females scored higher levels of stress than males. We see again the general maladaptive scores for females versus males in the Spanish population. For lack of interest no significant differences were found in Finland (Stubb, et al., 2011, the present study) or in Spain (the present study), but when comparing both populations, Spanish females got more maladaptive scores than Finnish females. Regarding exhaustion, males scored higher in Finland (Stubb et al., 2011), but in our Finnish sample no significant differences were found,

and even the opposite pattern was found in our Spanish sample. It seems that from the four well-being variables considered in our study, anxiety is the one more clearly showing gender differences. However, we have too little evidence focusing on gender differences and across cultures to make concrete hypothesis and draw conclusions, at least from our educational field.

5.4. Explanatory framework to understand writing conceptions and their link with psychological well-being (*study 3*)

The results of the cluster analysis confirm a relationship between writing conceptions and psychological well-being. Although further research in this line is needed to describe, explain and corroborate this relationship, it can be concluded -at least with the sample collected in the present study and after having applied a cluster analysis integrating the dimensions of writing and well-being of the questionnaire-, that when adaptive writing conceptions are reported, psychological well-being can be varied depending on the cases, but when writing conceptions tend to be maladaptive, a tendency to report higher ill-being scores is manifested. Complementing this result with the results of the two cluster analysis that measure each dimension separately, we can add -when paying attention to the extreme cases- that broadly speaking, adaptive writing conceptions tend to be linked with psychological well-being and maladaptive with ill-being.

The interpretation given to these results may also be explained differently, depending on the writing variables we refer to. This is why, first of all, we need to distinguish between conceptions *of* writing and conceptions *concerning* writing: we are going to refer to conceptions *of* writing to those conceptions that have directly to do with how we define or characterize writing (“*For me writing is.....*”, “*From my point of view writing implies.....*”). On the other hand, conceptions *concerning* writing would be the practices and habits we develop around the writing activity (“*When I write I tend to...*”, “*I cannot write if.....*”). Considering this, from the questionnaire used in this study, the Knowledge

creation and the Innate ability variables would refer to the first group and the other four variables (Blocks, Procrastination, Perfectionism and Productivity) to the second.

Regarding conceptions *of* writing (agreeing with more or less conviction that writing develops thinking, that writing is a skill which can or cannot be taught, among others), these are strongly related to our level of knowledge about writing as it is supported in the literature (some works have related conceptions of writing with deep and surface approaches to learning finding inspiration in the work of Bereiter and Scardamalia, 1987), so they are based on our previous learning experiences. If they tend to adopt a predominant maladaptive nature, it is quite understandable that the writing process may not become especially pleasant for the writer, compromising then his psychological well-being to a greater or lesser extent. How can a writer freely enjoy writing if he thinks that it is not possible to improve his writing skills and, in the worst case, perceiving himself/herself not to be skilful? However, if the conceptions of the writers are predominantly of adaptive nature, it is more likely that he/she experiences a better psychological well-being.

In the first case, when conceptions of writing tend to adopt a predominant maladaptive nature, it is highly likely that the writer will adopt maladaptive practices and habits around the writing activity (for example getting completely blocked every time he/she has to start writing thinking cannot meet the expectations of a “skilful writer”) that will reinforce negatively his psychological well-being. Therefore, very often maladaptive conceptions *of* writing will give rise to maladaptive conceptions *concerning* writing (but not necessarily maladaptive conceptions *concerning* writing are fruit of maladaptive conceptions *of* writing as we will see next). In the second case, when conceptions of writing tend to adopt a predominant adaptive nature, it is likely that the writer will adopt adaptive practices and habits around the writing activity –again this cannot be guaranteed as other issues can intercede in his psychological well-being. In that case getting blocked in front of the screen can, instead to be due to thinking one cannot meet the expectations of a “skilful writer”, be due to other concerns that do not let him/her focus on the writing activity that demands to be so highly task focused. Having said that, in that second case and in contrast to the first, adaptive conceptions *of* writing not necessarily will give rise to adaptive conceptions *concerning* writing but instead

adaptive conceptions *concerning* writing will more likely derive from adaptive conceptions *of* writing.

Regarding conceptions *concerning* writing, their relationship with psychological well-being could be explained by the fact that the practices we build up in our everyday around the writing activity (e.g. procrastinating very often or very seldom) are constructed not only based on our knowledge about writing or on the base of our writing skills, but also based on our general psychological well-being that can reinforce -in a more or less adaptive way- our behaviours around the writing activity, making our practices become more or less desirable habits. Having said that, we should reconsider our attitude towards a student that has adopted the habit to procrastinate on writing tasks, finding out what is happening with him/her and not mainly (or only) attributing this phenomenon, for example, to a lack of writing skills. Like we said with conceptions of writing, if conceptions concerning writing are maladaptive, it is more likely that the writer will suffer, but if they are adaptive his psychological well-being can be diverse depending on how many other issues are affecting his well-being.

It has to be clarified that in the data collected, the PhD students with more adaptive conceptions *concerning* writing reported in fact medium scores (except for the block variable in the cluster analysis of the writing dimension in specific), but they were indeed the most adaptive of the sample. The same happens with the PhD students that scored the highest levels of psychological well-being (except for the stress variable in the Exemplary group): they obtained medium scores but are the most adaptive of the sample. In contrast, regarding conceptions *of* writing all PhD students reported adaptive scores in Knowledge creation. However, there were significant differences between the first two groups and the Hardly survivors (or between the first and the two last in the cluster analysis of the writing dimension in specific). Regarding Innate ability, all groups reported medium scores except the group of the middle in both cluster analysis that report adaptive scores. All things considered, we need more empirical evidence with extreme cases (and also research with qualitative data) to support the relationship between writing conceptions and psychological well-being that has been explained.

These circumstances have some methodological and educational implications. Concerning methodology, the lack of variability of replies in the two variables that have to do with conceptions *of* writing make us reflect that these items could probably be more refined so that we could find out more differences among cases. However, from an educational point of view, these results describe the characteristics theoretically expected from PhD students, meaning that it is expected that most of the students will obtain adaptive scores in the knowledge creation variable, as PhD students have an extensive previous writing experience. Actually, the same questionnaire administered in Secondary education might obtain more variability of replies, considering that immature conceptions of writing are more frequent when students are younger (Castelló, 1999; Lavelle & Bushrow 2007; Mateos & Solé, 2012). However, it calls our attention that regarding the innate ability variable only one group obtained adaptive scores, which makes us reflect on the quality of the writing instruction that students receive along schooling (not only at the PhD level) and the implicit perceptions of writing behind this instruction (or lack of instruction). It is also notable in this large sample that the means in the most adaptive groups regarding conceptions *concerning* writing and psychological well-being were in fact medium scores. These results point to the challenges and complexity -or “struggle” more metaphorically speaking- that doctoral studies imply for students, even (at least how it works in Spain) if they have been carefully selected in their PhD programs. Indeed, 40% of the students in our sample have been labelled *Hardly Survivors*.

Moving now more specifically to the characteristics of the *Exemplary*, the *Survivors* and the *Hardly survivors*, more research is needed to contrast some specific results, like for example the fact that the Survivors reported better scores than the Exemplary in Innate ability (also in the writing dimension cluster analysis). An interpretation of this result is that the students with higher adaptive writing conceptions feel so confident about their writing skills that they attribute them not only to a learning process, but also to their person (so in the bridge between something you learn but also something you bring/possess). This aspect can become very dangerous for maladaptive students, but for the adaptive ones it becomes a positive reinforcement.

Regarding the variables that have to do with psychological well-being, it is interesting to observe the scores obtained in each of the groups. As the reader can expect with the label “the Exemplary”, these students were the less exhausted, the less anxious and the less stressed. However, between the *Survivors* and the *Hardly survivors* some results deserve special attention, but before going through them we are going to make a distinction concerning the variables that measure the well-being dimension. Although all of them measure ill-being aspects, some are “less desirable” than others: Lack of interest and Anxiety are the two we would consider the *less desirable* because they can critically endanger the PhD studies. Stress and Exhaustion certainly affect the quality of the well-being. However, they can also be prototypical symptoms of very task-focused PhD students, which means -although they can negatively affect the PhD process at some point-, they do it in a less critical way than the other two variables and can in fact be symptoms that the thesis work is progressing. It would be very interesting to contrast these speculations in future studies, extend them to other variables and, probably more accurately, check their adaptive and maladaptive adjustment. For example *Worry* would probably belong to the *less desirable* group in line with the results of Torrance and Thomas (1994), in which graduate research students reported that *worry about writing* prevented them from actually writing, but could also -with a different nature and a lower degree- become a stimulus to keep working. This would be in line with the experience fluctuation model (EFM), in which depending on the valence and arousal of emotions -based on the relationship between challenges and skills-, they have different meanings in the human conceptual system (Inkinen et al., 2013). However, research in this line is still incipient.

It is interesting to observe that the *Hardly survivors* were the ones that score the highest scores in the *less desirable* ill-being factors (Lack of interest and Anxiety) whereas the *Survivors* were the most exhausted, but in fact together with the *Exemplary* showed most interest and suffered a medium level of anxiety. In that case both groups showed high levels of stress. However, we would add that collecting qualitative data would be interesting here in order to analyse the stress content in both groups (why one group is stressed and which reasons argue the other), and probably we would see that the *Survivors* are more adjusted than the *Hardly survivors* in their stress. Following the EFM, we could find that a stressful experience coupled with high interest is probably an

active but not necessarily an unpleasant experience; meanwhile a stressful experience with low interest is probably a rather inactive and unpleasant experience. However, we would add that although the intensity of valence and arousal of emotions can vary in their effect, some emotions by their nature are less critical than others, as our study shows, e.g. to experience stress will normally be better than to experience anxiety.

Considering this, to the relationship between writing conceptions and psychological well-being discussed, we could add that the more maladaptive well-being is, the more likely it is that the scores are higher in the *less desirable* variables. This means, when referring to very maladaptive well-being PhD students (the ones that should seriously worry supervisors), we can associate them with the most anxious and the ones that show the most lack of interest (again we remind that in our sample we are talking about 40% of the PhD students with these characteristics).

Focusing on the results obtained regarding gender, age, fields of study and drop out thoughts the following aspects are discussed: in reference to gender, the fact that males report higher adaptive writing conceptions and female higher maladaptive writing conceptions, differences have not been found in the studies dealing with this aspect, at least in the USA and the Turkish context where this issue was tested (Lavelle & Bushrow, 2007 and also Klassen & Kuzucu, 2009 with adolescents and regarding procrastination specifically). Maybe it would be interesting to analyse gender differences more deeply in terms of different predictors of perfectionism, procrastination, among other variables, in males and females (considering also their cultural context) in order to obtain a more complete and explanatory picture. However, the fact that males report higher psychological well-being and female higher psychological ill-being, it is highly supported in the literature, stating that women suffer higher psychological distress during PhD studies than men (Kurtz-Costes et al., 2006; Toews et al., 1993, 1997; Nelson et al., 2001; Ülkü-Steiner et al., 2000). Considering the relationship established between writing conceptions and psychological well-being, it makes sense that if women tend to perceive higher psychological ill-being than men, this state may influence their practices and habits (at no time we refer to the results as students' texts have not been analyzed in this study) around academic work, especially

the complex activity of writing that requires being very task focused. Further research should be carried out in this line.

In respect to age, although in the cluster analysis integrating the writing and the well-being dimensions results were significant, it seems not to be a good variable in predicting adaptive writing conceptions exclusively, as it is shown in the other cluster analysis. This last result is quite reasonable and coherent, considering that some students started their PhD having experience in academic writing (they collaborated in a research group at university) while others had not (they worked in the professional field) and both circumstances happened at all ages. A better predicting factor -instead of age- would be the extent of academic experience. In fact the study of Torrance et al. (1992) confirms this point, by highlighting that research students' writing experiences and habits are distinct from those of novice undergraduates and similar to productive academics in terms of perceived difficulties and productivity. Taking this into account, it would be interesting to contrast our sample with undergraduates and check if our results support the findings of Torrance et al. (1992). In contrast, age seems to be a good variable in predicting psychological well-being during the PhD studies. We found that the groups in the extreme (21-24 and 45-58) were the most adaptive, whereas the ones between 25 and 34 were the most maladaptive. This result could be explained by the fact that a lot of the young students that participated in the study were at the very beginning of their PhD, and in turn did not feel yet a lot of pressure (some of them may not yet be conscious of the complexity that thesis work may entail). The most mature group probably had very clear ideas on what they want to research, or at least their professional experience helped them to face the thesis work. They might be in a phase of their lives in which they perceived the dissertation as something you do to enrich yourself (even for some of them close to a hobby). In contrast, PhD students between 25 and 34 probably felt a lot more pressure and had a different point of view of the dissertation than the previous group (more likely in that case as a means to promote themselves than as a hobby), as they might be in a critical phase of their lives deciding on/establishing their academic career and, in a lot of cases, in their personal lives starting to have a family (having children). Considering that 75.6% of our sample were in this age range, this could explain the high rate of Hardly survivors. All these interpretations should be tested in respect to the existing literature, considering only

Ülkü-Stenier, et al. (2000) related psychological well-being (exclusively stress in that case) with age in PhD students finding out that age was unrelated to students' reports. This remains a significant gap to be filled in the future.

Regarding the fields of study, the result that has to do with Art PhD students reporting higher adaptive writing conceptions than Science PhD students hasn't been corroborated in the literature review. However, in some studies dealing with writing for publication with doctoral graduates (Kamler, 2008) and doctoral researchers (Lee & Kamler, 2008) in an Australian context it was shown that the ones belonging to Science generally adopted better views to publish from their research than the Arts group linked to a greater support from their learning community (specially their mentors) and in fact were more productive in terms of number of publications (this last result was also supported in the large scale study of Nettles and Millett, 2006 with PhD students doing their doctoral studies in USA). Accordingly, it would have been interesting to have asked in our sample publication rates and check if results corresponded to their perceptions of productivity (Arts= 2.92; Science= 2.49; $p = .000$). Contrary to our finding, where Art PhD students reported higher psychological well-being whereas Science PhD students reported higher psychological ill-being, Kamler (2008) found that the Science ones showed more self-confidence about refereed publication and a more adjusted anxiety expressed. Considering that in our sample only 34% corresponded to Arts, it could seem that the few collaborators of Arts corresponded to the most enthusiastic or more conscientious students (see also Hartley & Knapper, 1984; Torrance et al., 1992). However, considering -generally speaking- that much less PhD students from Arts take doctoral studies (the rate of PhD students belonging to Arts and Humanities together with Legal and Social Science that defended their thesis in Spain from 1990 to 2009 correspond to the 34,8%), we don't think that was the case. Further research needs to be conducted on this issue.

Referring to drop out thoughts, it makes sense -considering our results- that the *Hardly survivor* group were the ones with higher rates in this aspect. Probably most PhD students in this group correspond to the 40% that will never finish their dissertations considering the big percentages of dropouts which is unfortunately a widespread phenomenon (not only in Spain). Probably also in this group we would more likely find

PhD students that take a lot of years in finishing their dissertations (a future research could be a follow-up study with the sample collected, checking the present situation in each group in order to contrast these hypotheses). It also calls the attention in our overview of the results -when combining the two cluster analysis done with the writing and the well-being dimensions separately- that in the ill-being group, when their writing conceptions were more adaptive, the idea of drop out decreased. This result is according to Torrance et al. (1994) in which PhD students reported they were more likely to see writing related difficulties as jeopardizing the completion of their PhD's.

To finish, one last aspect we would like to comment on in this discussion is the dimensionality of some factors like Procrastination and Perfectionism, as it has been explained in the theoretical section, in terms of their consideration as both adaptive and maladaptive factors. For this work we have considered all factors as linear evaluating them as adaptive if they had low scores or maladaptive if they got higher scores. We are sure that a more complex way to collect data considering both dimensions in both extremes would have enriched and complemented the description and explanation given to the relationship between writing conceptions and psychological well-being (we suggest future research could focus on that).

6. CONCLUSIONS (CATALAN VERSION)

A partir del nostre treball podem extreure les següents conclusions:

1. Tot i que l'experiència dels doctorands pot ser una eina molt útil per millorar la qualitat dels estudis de doctorat, no és habitual que es consideri com un element decisiu en les reformes d'aquests estudis. La revisió que hem dut a terme d'aquells estudis que mesuren l'experiència i que, fins el que sabem, no es troba sistematitzada en la literatura, pot ser un primer pas per reflexionar sobre les actuacions que s'han dut a terme fins ara i per prendre decisions futures.
2. En el nostre context, i segons el nostre coneixement, la present tesi constitueix el primer estudi a gran escala que recull la veu dels doctorands arran del territori espanyol. Entenem que el treball pot ajudar a entendre la satisfacció del doctorand en un context socio-històric particular vinculat a una normativa específica que regeix els programes de doctorat. Replicar-lo en un futur proper ens pot donar pistes tant per analitzar la consolidació de l'actual decret com per comparar la nova normativa amb les anteriors.
3. Pel que fa a l'escala d'escriptura *-The Writing Process Questionnaire* (Lonka et al., 2014)- constitueix una eina fiable per aplicar en població espanyola, l'anàlisi factorial de la qual reproduceix, en gran mesura, la mateixa estructura de la població en la que es va aplicar originàriament. Aquest instrument ens aporta informació variada –que fins el moment no s'havia abordat de forma tan complerta- sobre un ventall de concepcions adaptatives i desadaptatives envers l'escriptura que poden facilitar o obstruir el procés escriptor tant a nivell emocional com d'estratègies, podent-se utilitzar tant des d'un punt de vista exploratori com d'intervenció.
4. L'esmentat instrument, amb algunes adaptacions menors, s'ha pogut utilitzar per un estudi transcultural en el que l'anàlisi correlacional d'escala (afegint les corresponents a la dimensió de benestar) posa de manifest, a grans trets, que les concepcions adaptatives sobre l'escriptura estan lligades amb el benestar psicològic i les desadaptatives amb al malestar. De manera recurrent hem trobat en la literatura estudis que interrelacionen concepcions i benestar (en menor grau en l'àmbit de l'escriptura), però no hem trobat cap revisió que explori aquesta relació.

5. Els resultats que es desprenen del nostre estudi transcultural –en el que la població espanyola va obtenir puntuacions més desadaptatives que la finlandesa, especialment les dones i amb especial èmfasi en el factor d’esgotament- obren un ventall de possibilitats interpretatives que caldrà abordar en estudis posteriors per tal de seguir avançant en l’estudi de variables que promouen o dificulten una experiència satisfactòria del doctorat. Amb tot, estem convençuts que el factor cultural té un pes important tal i com s’ha argumentat en aquest treball.
6. Pel que fa a l’estudi de perfils amb població espanyola en el que es combina la dimensió d’escriptura i de benestar, el fet que el perfil més adaptatiu puntuï en la majoria dels factors amb valors mitjos i que el 40% de la mostra s’inclouï en el perfil més desadaptatiu, convida a reflexionar sobre la insatisfacció d’aquests estudiants amb el seu procés doctoral en el nostre context universitari.
7. D’altra banda, en l’estudi de perfils la relació entre concepcions sobre escriptura i benestar dóna peu a un marc explicatiu –en el que es conjuga la distinció entre concepcions *d’escriptura* i concepcions *entorn* l’escriptura, i també d’emocions *més o menys desitjables*- que pot ser d’interès tant per l’estudi de l’escriptura, com de les emocions i la seva interrelació. Pensem que aquest marc explicatiu encara es pot enriquir més si dotem l’instrument de més complexitat (d’acord amb les directrius que s’han assenyalat en el treball) per tal que ens permeti explicar amb més detall com les concepcions sobre l’escriptura, especialment les que giren al voltant de les pràctiques i hàbits que desenvolupem davant l’activitat escriptora, passen pel filtre de les nostres emocions, la qual cosa remet al fet de que allò que pensem i sentim senzillament va de la mà.

6. CONCLUSIONS (ENGLISH VERSION)

From our work we can draw the following conclusions:

1. Although the experience of doctoral students can be a very useful tool to improve the quality of doctoral studies, it is not usually considered as a decisive element in the reforms of these studies. The review we conducted around those studies that measure the experience –the first systematic overview so far- can be a first step to reflect on the actions that have been taken so far and to make future decisions.
2. In our context, and according to our knowledge, the present work constitutes the first large-scale study that collects the perspectives of doctoral candidates in Spain. We understand that the present work contributes to the understanding of the candidate's satisfaction in a particular socio-historical context, linked to specific regulations governing doctoral programs. Replicating the study in the near future can give us clues to analyze the consolidation of the present decree, comparing the current with previous regulations.
3. Concerning the writing scale, *The Writing Process Questionnaire* (Lonka et al., 2014) is a reliable tool to apply in the Spanish population. Its factorial analysis reproduces largely the same structure than the population in which it was originally applied. This instrument provides us with various information -not addressed so completely until the moment- about a range of adaptive and maladaptive conceptions towards writing that may facilitate or hinder the writing process both emotionally and strategically. It can be used both from an exploratory and interventional point of view.
4. This tool, with some minor adaptations, was used for a cross-cultural study. The correlation analysis of scales (adding the ones from the well-being dimension) shows that adaptive writing conceptions are linked with psychological well-being and maladaptive with ill-being. We repeatedly encountered studies in the literature relating conceptions and well-being (to a lesser degree in the field of writing), but we have not found any review exploring this relationship.
5. As a result from our cross-cultural study, the Spanish population obtained more maladaptive scores than the Finnish, especially women and with special emphasis of the exhaustion factor. This opens a range of interpretive possibilities that need to be addressed in future studies to further advance the

study of variables that promote or hinder a successful doctoral experience. Generally, we are convinced that culture is an important factor to explain differences.

6. The study of profiles with the Spanish population, in which the writing and well-being dimensions are combined, invites reflection on students' dissatisfaction with their PhD process in our university context. Students in the most adaptive profile scored in most factors with medium values; 40% of the sample was included in the most maladaptive profile.
7. Moreover, the relationship between writing conceptions and psychological well-being leads to an explanatory framework that combines the distinction between conceptions *of* writing and conceptions *concerning* writing with *more* or *less desirable* emotions. This may contribute to the study of writing, emotions and their relationship. We believe that this explanatory framework can be enriched even more if we provide more complexity to the instrument (based on the guidelines that have been developed in this work). This would allow us to further explain how writing conceptions, especially those around the practices and habits that we develop when facing a writing activity, are filtered through our emotions. This reminds to the fact that what we think and feel simply goes hand in hand.

7. REFERENCES

Agudelo, D., Bretoón-Lopez, J., Ortiz-Recio, G., Poveda-Vera, J., Teva, I., Valor-Segura, I., & Vico, C. (2003). Análisis de la productividad científica de la psicología española a través de las tesis doctorales [Analysis of the scientific productivity of the Spanish psychology through the doctoral theses]. *Psicothema*, *15*(4), 595-609.

Agudelo, D., Bretón-López, J., Poveda-Vera, J., Teva, I., Valor-Segura, I., & Vico, C. (2003). ¿Cómo tener éxito en un doctorado en Psicología? Opinión de los directores de Tesis Doctorales más productivos en España [How to get success in a doctorate in Psychology? The opinion of the most productive headmasters of Doctoral Thesis in Spain]. *International Journal of Clinical and Health Psychology*, *3*(3), 565-593.

Aguilar, J., Martínez, M., Valencia, A., Romero P., & Vargas, V. (2001). Interrelaciones de Factores Asociados a la Motivación Intrínseca [Interrelation of factors associated with intrinsic motivation]. *Revista Mexicana de Psicología*, *18*(2), 265-272.

Aitchison, C. (2009). Writing groups for doctoral education. *Studies in Higher Education*, *34*(8), 905-916.

Alexander, E.S., & Onwuegbuzie, A.J. (2007). Academic procrastination and the role of hope as a coping strategy. *Personality and Individual Differences*, *42*, 1301-1310.

Anderson, M.S. (1996). Collaboration, the doctoral experience, and the departmental environment. *Review of Higher Education*, *19*(3), 305-326.

Appel, M. L., & Dahlgren, L. G. (2003). Swedish Doctoral Students' Experiences on their Journey towards a PhD: Obstacles and opportunities inside and outside the academic building. *Scandinavian Journal Of Educational Research*, *47*(1), 89-110.

Arnett, J.J. (2002). The psychology of globalization. *American Psychologist*, *57*, 774–783.

Ashby, J. S., Noble, C. L., & Gnilka, P. B. (2012). Multidimensional Perfectionism, Depression, and Satisfaction with Life: Differences among Perfectionists and Tests of a Stress-Mediation Model. *Journal Of College Counseling, 15*(2), 130-143.

Azizi, S., & Nikbakhsh, R. (2013). The relationship between perfectionism and burnout among physically-motionally disabled elite athletes. *Journal of Iranian Psychologists, 9*(34), 157-168.

Bandura (1988). Self-efficacy conception of anxiety. *Anxiety Research, 1*(2), 77-88.

Barnes, J.B., & Randall, J. (2011). Doctoral student satisfaction: an examination of disciplinary, enrollment and institutional differences. *Research in Higher Education, 53*(1), 47-75.

Baxter Magolda, M.B. (1998). Developing self-authorship in graduate school. *New Directions for Higher Education, 26*, 41-54.

Bell-Ellison, B., & Dedrick, R. F. (2008). What do graduate students value in their ideal mentor? *Research in Higher Education, 49*, 555-567.

Bembenuity, H. (2009). Test Anxiety and Academic Delay of Gratification. *College Student Journal, 43*(1), 10-21.

Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Erlbaum.

Bermúdez, M. P., Castro, A., Sierra, J. C, & Buela-Casal, G. (2009). Análisis descriptivo transnacional de los estudios de doctorado en el EEES [A descriptive transnational analysis of the doctoral degree programmes in the EHEA]. *Revista de Psicodidáctica, 14*(2), 193-210.

Bermúdez, M. P., Guillén-Riquelme, A., Gómez-García, A., Quevedo-Blasco, R., Sierra, J. C., & Buela-Casal, G. (2011). Análisis del rendimiento en el doctorado en

función del sexo [Sex-based performance assessment in doctoral degrees]. *Educación XXI*, 14(1), 17-33.

Beswick, G., Rothblum, E.D., & Mann, L. (1988). Psychological antecedents of student procrastination. *Australian Psychologist*, 23(2), 207-217.

Biegel D.E., Hokenstad, M.C., Singer, M.I., & Quo, S.Y. (2006). One school's experience in reconceptualizing part-time doctoral education in social work. *Journal of social work education*, 42(2), 231-247.

Bishop, W. (1993). Students' stories and the variable gaze of composition research. In S.I. Fontaine, & S. Hunter (Eds.), *Writing Ourselves into the Story* (pp. 197-214). Carbondale, IL: Southern Illinois University Press.

Björk, L., & Bräuer, G. (Eds.). (2003). *Teaching academic writing in European higher education* (Vol. 12). Springer.

Björk, L., & Räisänen, C. (1996). *Academic writing. A university writing course*. Lund: Studentlitteratur.

Boekaerts, M. (2003). How do students from different cultures motivate themselves for academic learning? In F. Salili & R. Hoosain (Eds.), *Teaching, learning, and motivation in a multicultural context* (pp. 13–31). Greenwich, CT: Information Age.

Boice, R. (1990). *Professors as writers. A self-help guide to productive writing*. Stillwater, Oklahoma: New Forums Press.

Boice, R. (1993). Writing blocks and tacit knowledge. *Journal of Higher Education*, 64, 19-54.

Boice, R. (1996). *Procrastination and blocking: A novel, practical approach*. Westport, CT, US: Praeger Publishers/Greenwood Publishing Group. xxix.

Boice, R., Shaughnessy, P., & Pecker, G. (1985). Women and publishing in psychology. *American Psychologist*, 40(5), 577-578.

Boletín Oficial de las Cortes Generales [Official Gazette of the Parliament]. (2013, September). Informe de la subcomisión creada en el seno de la comisión de igualdad para el estudio de la racionalización de horarios, la conciliación de la vida personal, familiar y laboral y la corresponsabilidad [Report of the subcommittee created within the equality committee to study the rationalization of schedules, reconciliation of personal, family and professional life and responsibility]. Congreso de los diputados.

Bowen, W.G., & Rudenstine, N. (1992). *In Pursuit of the PhD*. Princeton University Press.

Brownlow, S., & Reasinger, R. (2000). Putting Off until Tomorrow What Is Better Done Today: Academic Procrastination as a Function of Motivation toward College Work. *Journal of Social Behavior & Personality*, 15(5), 15-34.

Buela-Casal, G. (2005). Recomendaciones para superar un programa de doctorado [Recommendations to pass a doctoral program]. In G. Buela-Casal (Ed.), *Manual práctico para hacer un doctorado [Practical Handbook for making a PhD]* (pp. 151-171). Madrid: EOS.

Buela-Casal G., Bermúdez M.P., Sierra J.C., Ramiro, M.T., & Castro, A. (2011). Análisis del rendimiento en el doctorado en función de las normativas de los estudios de doctorado en las universidades españolas [Performance analysis of doctoral studies in accordance with the regulations of doctoral degree in Spanish universities]. *Cultura y Educación*, 23(2), 285-296.

Buela-Casal, G., & Castro, Á. (2008). Criterios y estándares para la obtención de la Mención de Calidad en Programas de Doctorado: Evolución a través de las convocatorias [Criteria and standards to obtain the Doctorate Quality Mention: evolution through announcements]. *International Journal Of Psychology & Psychological Therapy*, 8(1), 127-136.

Buela-Casal, G., Guillén-Riquelme, A., Bermúdez, M. P., & Sierra, J. C. (2011). Análisis del rendimiento en el doctorado en función de las becas de Formación de Profesorado Universitario y de Formación de Personal Investigador [Analysis of performance in Spanish doctoral FPU/FPI research fellowships]. *Cultura y Educación*, 23(2), 273-283.

Buela-Casal, G., Guillén-Riquelme, A., Guglielmi, O., Quevedo-Blasco, R., & Ramiro, M. T. (2011). Rendimiento en el doctorado en función del área de conocimiento [PhD Performance Regarding the Knowledge Field]. *Revista de Psicodidáctica*, 16(1), 181-192.

Buela-Casal, G., Gutiérrez-Martínez, O., Bermúdez-Sánchez, M.P., & Vadillo-Muñoz, O. (2007). Comparative study of international academic rankings of universities. *Scientometrics*, 71(3), 349-365.

Caffarella, R. S., & Barnett, B. G. (2000). Teaching Doctoral Students To Become Scholarly Writers: The Importance of Giving and Receiving Critiques. *Studies In Higher Education*, 25(1), 39-52.

Can, G., & Walker, A. (2011). A Model for Doctoral Students' Perceptions and Attitudes Toward Written Feedback for Academic Writing. *Research in Higher Education*, 52(5), 508-536.

Cano-Fernandez J.L., Lidon-Lopez, I., & Rebollar-Rubio, R. (2011). El doctorado en Ingeniería Industrial en España [The Ph.D. in Industrial Engineering in Spain]. *DYNA*, 86(1), 29-40.

Cao, L. (2012). Examining "Active" Procrastination from a Self-Regulated Learning Perspective. *Educational Psychology*, 32(4), 515-545.

Carlino, P. (2012). Helping education doctoral students face writing and emotional challenges towards identity change. In M. Castelló & C. Donahue (Eds.), *University*

writing: Selves and texts in academic societies. Sig-W Series Volume on Academic Writing. London: Emerald Group.

Castelló, M. (1999). El conocimiento que tienen los alumnos sobre la escritura [The knowledge that students have about writing]. In J.I. Pozo & C. Monereo. *El aprendizaje estratégico [Strategic learning]*. Madrid. Santillana.

Castelló, M. (2008). Usos estratégicos de la lengua en la universidad. Tácticas de regulación de la escritura en estudiantes de doctorado [Strategic uses of language in the university. Regulatory Writing Tactics in doctoral students]. In A. Camps & M. Milian (Eds.), *Miradas y voces. Investigación sobre la educación lingüística y literaria en entornos plurilingües [Approaches and perspectives. Research on linguistic and literary education in multilingual contexts]* (pp. 75-90). Barcelona: Graó.

Castelló, M., & Donahue, C. (Eds.). (2012). *University writing: Selves and Texts in Academic Societies*. Volume Series in Writing. Bingley, UK: Emerald group Publishing Limited.

Castelló, M. Iñesta, A., & Corcelles, M. (2013). Learning to Write a Research Article: Ph.D. Students' Transitions toward Disciplinary Writing Regulation. *Research in the Teaching of English*, 47(4).

Castelló, M., Iñesta, A., & Monereo, C. (2009). Towards self-regulated academic writing: an exploratory study with graduate students in a situated learning environment. *Electronic Journal of Research in Educational Psychology*, 9 (3), 1107-1130.

Castells, M., & Himanen, P. (2003). *The Information Society and the Welfare State: The Finnish Model*. Oxford: Oxford University Press.

Cerrato-Lara, M., & Castelló, M. (2011, September). Linking writing and well-being in the PhD experience: a study from the perceptions. Paper presented at the 14th Biennial Conference EARLI 2011: *Education for a Global Networked Society*. Exeter, United Kingdom.

Chang, E.C. (2006). Perfectionism and dimensions of psychological well-being in a college student sample: A test of a stress-mediation model. *Journal of Social and Clinical Psychology, 25*(9), 1001-1022.

Chang, E.C., Lin, N. J., Herringshaw, A. J., Sanna, L.J., Fabian, C.G., Perera, M.J., & Marchenko, V.V. (2011). Understanding the link between perfectionism and adjustment in college students: Examining the role of maximizing. *Personality and Individual Differences, 50*(7), 1074-1078.

Chang, E.C., & Rand, K.L. (2000). Perfectionism as a Predictor of Subsequent Adjustment: Evidence for a Specific Diathesis-Stress Mechanism among College Students. *Journal Of Counseling Psychology, 47*(1), 129-137.

Chang, E. C., Watkins, A., & Banks, K. (2004). How Adaptive and Maladaptive Perfectionism Relate to Positive and Negative Psychological Functioning: Testing a Stress-Mediation Model in Black and White Female College Students. *Journal Of Counseling Psychology, 51*(1), 93-102.

Cheatham, T.R., Edwards, J.R., & Erickson, K.V. (1982). The doctoral dissertation in speech-communication - an inventory of attitudes and experiences. *Communication Education, 31*(4), 315-323.

Chi, H-y., Zhao, R., Hou, Z-j., & Lin, N. (2012). Relationship between perfectionism and procrastination in undergraduate students: Mediating effect of achievement motivation. *Chinese Journal of Clinical Psychology, 20*(2), 233-236.

Chiang, K.H. (2011). The Experience of Doctoral Studies in the UK and France: differences in epistemology, research objects and training. *European Journal of Education, 46*(2), 257-270.

Childs, J.H., & Stoeber, J. (2012). Do you want me to be perfect? Two longitudinal studies on socially prescribed perfectionism, stress and burnout in the workplace. *Work & Stress, 26*(4), 347-364.

Chitez, M., & Kruse, O. (2012). Writing Cultures and Genres in European Higher Education. In M. Castelló, & C. Donahue (Eds.), *University writing: Selves and Texts in Academic Societies*. Studies in Writing, 24 (pp. 151-175). Bingley, UK: Emerald.

Civera, C., & Tortosa, F. (2001). Estado de la investigación psicológica en España: el grado de Doctor y la investigación académica (1976-1998) [The state of psychological research in Spain: The Doctorates degree and academic research (1976-1998)]. *Papeles del Psicólogo*, 79, 42-52.

Cohen, M.R. (1998). The pause that represses: The experience of working through writer's block during the dissertation writing process. Massachusetts School of Professional Psychology.

Coromina, L., Capo, A., Guia, J., & Coenders, G. (2011). Effect of Background, Attitudinal and Social Network Variables on PhD Students' Academic Performance. A Multimethod Approach. *ESE-estudios sobre educación*, 20, 233-253.

Cotterall, S. (2011). Doctoral students writing: where's the pedagogy? *Teaching in Higher Education*, 16(4), 413-425.

Crossouard, B., & Pryor, J. (2009). Using email for formative assessment with professional doctorate students. *Assessment & Evaluation in Higher Education*, 34(4), 377-388.

Cuetara, J., & Lecapitaine, J. (1991). The relationship between dissertation writing experiences and doctoral training environments. *Education*, 112(2), 233-241.

Daouk, L., McDowall, A., & Rust, J. (2006). A multi-method approach to cross-cultural test adaptation: a focus on qualitative methods. ITC, Brussels.

de Lange, N., Pillay, G., & Chikoko, V. (2011). Doctoral learning: a case for a cohort model of supervision and support. *South African Journal of Education*, 31(1), 15-30.

de Wolf, V. A., & Washington Univ., S. r. (1980). Early Career Experiences of UW Doctorates as a Function of Degree Field and Gender. EAC Reports.

Delcambre, I., & Dinahue, C. (2012). Academic genres in French humanities. In M. Torrance, D. Alamargot, M. Castelló, F. Ganier, O. Kruse, A. Mangen, L. Tolchinsky, & L. Van Waes (Eds.), *Learning to Write Effectively: Current Trends in European Writing Research*. London: Emerald Publishers.

DeLyser, D. (2003). Teaching graduate students to write a seminar for thesis and dissertation writers. *Journal of Geography in Higher Education*, 27(2), 169–181.

Díaz, R. J., Glass, C. R., Arnkoff, D. B., & Tanofsky-Kraff, M. (2001). Cognition, Anxiety, and Prediction of Performance in 1st-Year Law Students. *Journal Of Educational Psychology*, 93(2), 420-29.

Dillman, D. A. (2007). *Mail and Internet surveys: the tailored design method*. New York: John Wiley and Sons.

Dyshe, O. (2007). How a reform affects writing in higher education. *Studies in Higher Education*, 32(2), 237-252.

Elo, A-L., Leppänen, A., & Jahkola, A. (2003). Validity of single-item measure of stress symptoms. *Scandinavian Journal of Work, Environment and Health*, 29(6), 444-604.

Else-Quest, N. M., Hyde, J. S., Goldsmith, H. H., & Van Hulle, C. A. (2006). Gender differences in temperament: A meta-analysis. *Psychological Bulletin*, 132, 33–72.

Enders, J. (2005). Border crossings: Research training, knowledge dissemination and the transformation of academia work. *Higher Education*, 49, 119-133.

Erez, A., & Judge, T.A. (2001). Relationship of core self-evaluations to goal setting, motivation, and performance. *Journal of Applied Psychology*, 86(6), 1270-1279.

Eum, K., & Rice, K.G. (2011). Test anxiety, perfectionism, goal orientation, and academic performance. *Anxiety, Stress & Coping: An International Journal*, 24(2), 167-178.

Evans, C. (2007). The experience of international doctoral education in nursing: An exploratory survey of staff and international nursing students in a British university. *Nurse education today*, 27(5), 499-505.

Ewen, H. H., Carr, D. C., & Reynolds, C. (2012). Tomorrow Belongs to Those Who Prepare for It Today: Gerontology Doctoral Students Career Aspirations. *Gerontology & Geriatrics Education*, 33(2), 166-182.

Ewen, H. H., Watkins, J. F., & Bowles, S.L. (2006). Gerontology doctoral training: The value of goals, program perceptions, and prior experience among students. *Educational Gerontology*, 32(9), 757-770.

Eyres, S. J., Hatch, D. H., Turner, S. B., & West, M. (2001). Doctoral students' responses to writing critique: Messages for teachers. *Journal of Nursing Education*, 40(4), 149–155.

Ferrari, J.R. (1992). Procrastinators and perfect behavior: An exploratory factor analysis of self-presentation, self-awareness, and self-handicapping components. *Journal of Research in Personality*, 26(1), 75-84.

Ferrari, J. R., Díaz-Morales, J. F., O'Callaghan, J., Díaz, K., & Argumedo, D. (2007). Frequent behavioral delay tendency by adults: International prevalence rates of chronic procrastination. *Journal of Cross-Cultural Psychology*, 38, 458–464.

Ferrari, J.R., Parker, J.T., & Ware, C.B. (1992). Academic procrastination: Personality correlates with Myers-Briggs types, self-efficacy, and academic locus of control. *Journal of Social Behavior & Personality*, 7(3), 495-502.

Ferrari, J.R., & Thompson, T. (2006). Impostor fears: Links with self-presentational concerns and self-handicapping behaviours. *Personality and Individual Differences*, *40*, 341-352.

Fishman, J. A., & Galguera, T. (2003). *Introduction to test construction in the social and behavioral sciences*. New York: Rowman and Littlefield Publishers.

Flett, G.L., Blankstein, K.R., Hewitt, P.L., & Koledin, S. (1992). Components of perfectionism and procrastination in college students. *Social Behaviour and Personality*, *20*, 85-94.

Flett, G.L., Stainton, M., Hewitt, P.L., Sherry, S. B., & Lay, C. (2012). Procrastination automatic thoughts as a personality construct: An analysis of the Procrastinatory Cognitions Inventory. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *30*(4), 223-236.

Floyd, F.J., & Widaman, K.F. (1995). Factor Analysis in the Development and Refinement of Clinical Assessment Instruments. *Psychology Assessment*, *7*(3), 286-299.

Fritzsche, B.A., Young, B.R., & Hickson, K.C. (2003). Individual differences in academic procrastination tendency and writing success. *Personality and Individual Differences*, *35*, 1549-1557.

Fuentes-Pujol, E., & Arguimbau-Vivo, L. (2010). Las tesis doctorales en España (1997-2008): análisis, estadísticas y repositorios cooperativos [Doctoral theses in Spain (1997-2008): analyses, statistics and cooperative repositories]. *Revista Española de Documentación Científica*, *33*(1), 63-89.

Fuhrmann, C.N., Halme, D.G., O'Sullivan, P.S., & Lindstaedt, B. (2011). Improving Graduate Education to Support a Branching Career Pipeline: Recommendations Based on a Survey of Doctoral Students in the Basic Biomedical Sciences. *Cbe-life sciences education*, *10*(3), 239-249.

Galyon, C. E., Blondin, C. A., Yaw, J. S., Nalls, M. L., & Williams, R. L. (2012). The Relationship of Academic Self-Efficacy to Class Participation and Exam Performance. *Social Psychology Of Education: An International Journal*, 15(2), 233-249.

Ganobcsik-Williams, L. (Ed.). (2006). *Teaching Academic Writing in UK Higher Education: Theories, Practices and Models*. London: Palgrave Macmillan.

Geber, H., & Bentley, A. (2012). Can Low-Cost Support Programmes with Coaching Accelerate Doctoral Completion in Health Science Faculty Academics? *Perspectives In Education*, 30(3), 30-38.

Gnilka, P. B., Ashby, J. S., & Noble, C. M. (2012). Multidimensional Perfectionism and Anxiety: Differences among Individuals with Perfectionism and Tests of a Coping-Mediation Model. *Journal Of Counseling & Development*, 90(4), 427-436.

Golde, C. M., & Dore, T. M. (2001). *At cross purposes: What the experiences of doctoral students reveal about doctoral education* (www.phd-survey.org). Philadelphia, PA: A report prepared for The Pew Charitable Trusts.

Golde, C.M., & Dore, T.M. (2004). The Survey of Doctoral Education and Career Preparation. The importance of Disciplinary Contexts. A D.H. Wulff y A.E. Austin, *Paths to the Professoriate: Strategies for Enriching the Preparation of Future Faculty*. (p. 19-45). San Francisco: Jossey-Bass.

Gotwals, J.K. (2011). Perfectionism and burnout within intercollegiate sport: A person-oriented approach. *The Sport Psychologist*, 25(4), 489-510.

Goulden, N. (1991). Report of the Perceptions of Communication and Relationships during the Dissertation Process by Speech Communication Doctoral Advisors and Advisees. *ACA Bulletin*, 76, 39-48.

Gran Diccionari de la Llengua Catalana (1995). Gran Diccionari de la Llengua Catalana [Great Dictionary of the Catalan Language] (3rd ed.). Barcelona: Grup Enciclopèdia Catalana.

Grevholm, B., Persson, L-E., & Wall, P. (2005). A dynamic model for education of doctoral students and guidance of supervisors in research groups. *Educational Studies in Mathematics*, 60(2), 173-197.

Guillén-Riquelme, A., Guglielmi, O., Ramiro, M.T, Castro, A., & Buéla-Casal, G. (2010). Rendimiento en el doctorado de los becarios FPU y FPI en el Consejo Superior de Investigaciones Científicas y en las universidades públicas españolas [Comparative analysis of the performance in the doctorate of the FPU and FPI in the superior council of scientific research and Spanish universities]. *Aula Abierta*, 38(2), 75-82.

Green, W. (2007). Write on or write off? An exploration of Asian international students' approaches to essay writing at an Australian university. *Higher Education Research & Development*, 26(3), 329-344.

Gregersen, T., & Horwitz, E.K. (2002). Language learning and perfectionism: Anxious and non-anxious language learners' reactions to their own oral performance. *Modern Language Journal*, 86(4), 562-570.

Grunschel, C., Patrzek, J., & Fries, S. (2013). Exploring different types of academic delays: A latent profile analysis. *Learning and Individual Differences*, 23, 225-233.

Gustafsson, M. (2011). Writing centres/centers and English language learners: Research on institutional pressures, programmatic challenges, student expectations, and culturally sensitive strategies (Part II). *Writing Research across Borders*. Fairfax, VA: George Mason University.

Gute, D., & Gute, G. (2008). Flow writing in the liberal arts core and across the disciplines: A vehicle for confronting and transforming academic disengagement. *The Journal of General Education*, 57, 191-222.

Haake, U. (2011). Contradictory values in doctoral education: a study of gender composition in disciplines in Swedish academia. *Higher Education*, 62(1), 113-127.

Hackett, G., & Campbell, N. K. (1987). Task Self-Efficacy and Task Interest as a Function of Performance on a Gender-Neutral Task. *Journal Of Vocational Behavior*, 30(2), 203-15.

Haeffel, G. J., & Howard, G. S. (2010) Self-report: Psychology's four-letter word. *The American Journal of Psychology*, 123(2), 181-188.

Hagerman-Muller, K.E. (1986). Difficulties with the dissertation as revealed in incubated dreams. *Dissertation Abstracts International*, 46(12-B, Pt 1), 4401.

Haksever, A.M., & Manisali, E. (2000). Assessing supervision requirements of PhD students: The case of construction management and engineering in the UK. *European Journal of Engineering Education*, 25, 19-32.

Hambleton, R. K. (2005). Issues, designs, and technical guidelines for adapting tests into multiple languages and cultures. *Adapting educational and psychological tests for cross-cultural assessment*, 3-38.

Harman, K. (2002). The research training experiences of doctoral students linked to Australian Cooperative Research Centres. *Higher Education*, 44(3-4), 469-492.

Harman, G. G. (2003). International PhD Students in Australian Universities: Financial Support, Course Experience and Career Plans. *International Journal Of Educational Development*, 23(3), 339-351.

Hartley, J., & Fox, C. (2004). Assessing the mock viva: the experiences of British doctoral students. *Studies in Higher Education*, 29(6), 727-738.

Hartley, J., & Knapper, C.J. (1984). Academics and their writing. *Studies in Higher Education*, 9, 151-167.

- Hayashi, J. (2009). The relationship between cognitive content and emotions following dilatory behavior: Considering the level of trait procrastination. *Japanese Journal of Psychology*, 79(6), 514-521.
- Haycock, L. A., McCarthy, P., & Skay, C. L. (1998). Procrastination in College Students: The Role of Self-Efficacy and Anxiety. *Journal Of Counseling & Development*, 76(3), 317-24.
- Heine, S. J. (2004). Positive self-views: Understanding universals and variability across cultures. *Journal of Cultural and Evolutionary Psychology*, 2, 109–122.
- Helmets, K.F., Danoff, D., Steinert, Y., Leyton, M., & Young, S.N. (1997). Stress and depressed mood in medical students, law students, and graduate students at McGill University. *Acad Med*, 72 (8), 708–14.
- Henning, L.H. (1981). Paradox as a treatment for writer's block. *Personnel & Guidance Journal*, 60(2), 112-113.
- Hernandez, N. (1985). *The fourth, composite "R" for graduate students: Research*. (ERIC Document Reproduction Service No. ED 267671).
- Holahan, C.K. (1979). Stress experienced by women doctoral students, need for support, and occupational sex typing: An interactional view. *Sex Roles*, 5(4), 425-436.
- Hyland, F., & Hyland, K. (2001). Sugaring the pill. Praise and criticism in written feedback. *Journal of Second Language Writing*, 10, 185-212.
- Inkinen, M., Lonka, K., Hakkarainen, K., Muukkonen, H., Litmanen, T., & Salmela-Aro, K. (2013). The interface between core affects and the challenge–skill relationship. *Journal of Happiness Studies*, 14(3).

Inman, A.G., Schlosser, L.Z., Ladany, N., Howard, E.E., & Boyd, D.L. (2011). Advisee Nondisclosures in Doctoral-Level Advising Relationships. *Training and education in professional psychology*, 5(3), 149-159.

Instituto Nacional de Estadística, INE. (2012). *Instituto Nacional de Estadística* [National Institution of Statistics]. Madrid: INE. Last visit 15th of February 2013. Available in: <http://www.ine.es/>

Ivanič, R. (1998). *Writing and Identity. The discursal construction of identity in academic writing*. Amsterdam: John Benjamins.

Ivankova, N. V., & Stick, S. L. (2007). Students' Persistence in a Distributed Doctoral Program in Educational Leadership in Higher Education: A Mixed Methods Study. *Research in Higher Education*, 48(1), 93-135.

Jackson, T., Weiss, K. E., & Lundquist, J.J. (2000). Does procrastination mediate the relationship between optimism and subsequent stress? *Journal of Social Behavior & Personality*, 15(5), 203-212.

Jacobsson, G., & Gillström, P. (2006). *International postgraduate students mirror: Catalonia, Finland, Ireland and Sweden* Stockholm: Högskoleverket –Swedish National Agency for Higher Education.

Jazvac-Martek, M. (2009). Oscillating role identities: the academic experiences of education doctoral students. *Innovations in education and teaching international*, 46(3), 253-264.

Juntasopeepu, P., Kunaviktikul, W., Chintanawat, R., & Srisuphan, W. (2012). Quality of Thailand's PhD level nursing education. *Thai Journal of Nursing Council*, 27 (2), 36-50.

Kamler, B. (2008). Rethinking doctoral publication practices: Writing from and beyond the thesis. *Studies in Higher Education*, 33(3), 283–294.

- Kaplowitz, M.D., Hadlock, T.D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly*, 68(1), 94–10.
- Kim, M.J., Park, C.G., Kim, M., Lee, H., Ahn, Y-H., Kim, E.,... Lee, K-J. (2012). Quality of nursing doctoral education in Korea: Towards policy development. *Journal of Advanced Nursing*, 68 (7), 1494-1503.
- Kim, M. J., Park, C. G., Park, S. H., Khan, S., & Ketefian, S. (2014). Quality of Nursing Doctoral Education and Scholarly Performance in U.S. Schools of Nursing: Strategic Areas for Improvement. *Journal of Professional Nursing*, 30(1), 10-18.
- Klassen, R.M., Ang, R. P., Chong, W., Krawchuk, L. L., Huan, V. S., Wong, I. F., & Yeo, L. (2009). A Cross-Cultural Study of Adolescent Procrastination. *Journal Of Research On Adolescence*, 19(4), 799-81.
- Klassen, R.M., Ang, R.P., Chong, W. H., Krawchuk, L.L., Huan, V.S., Wong, I. Y.F., & Yeo, L. S. (2010). Academic procrastination in two settings: Motivation correlates, behavioral patterns, and negative impact of procrastination in Canada and Singapore. *Applied Psychology: An International Review*, 59(3), 361-379.
- Klassen, R. M., & Georgiou, G. K. (2008). Spelling and writing self-efficacy of Indo Canadian and Anglo Canadian early adolescents. *Journal of International Migration and Integration*, 9,311–326.
- Klassen, R.M., Krawchuk, L.L., Lynch, S.L., & Rajani, S. (2008). Procrastination and Motivation of Undergraduates with Learning Disabilities: A Mixed-Methods Inquiry. *Learning Disabilities Research & Practice*, 23(3), 137-147.
- Klassen, R. M., Krawchuk, & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination. *Contemporary Educational Psychology* 33, 915–931.

Klassen, R. M., & Kuzucu, E. (2009). Academic procrastination and motivation of adolescents in Turkey. *Educational psychology, 29*(1), 69-81.

Kluever, R.C. (1997). Students' Attitudes Toward the Responsibilities and Barriers in Doctoral Study. *New Directions For Higher Education, 99*, 47-56.

Koerner, K. C., & Mahoney, M. J. (2005). Los orígenes del doctorado en Psicología [The origins of the doctorate in Psychology]. In G. Bucla-Casal (Ed.), *Manual práctico para hacer un doctorado [Practical Handbook for making a PhD]* (pp. 19-39). Madrid: EOS.

Koncel, M.A., & Carney, D. (1992). When worlds collide: negotiating between academic and professional discourse in a graduate social work program. Paper presented at the *Conference on College Composition and Communication*, Cincinnati, OH, mimeo.

Korajlija, A.L., Jokić-Begić, N., & Kamenov, Ž. (2003). Koliko je za neuspjeh u studiju odgovoran perfekcionizam i negativni atribucijski stil? [Role of perfectionism and negative attributional style in study failure]. *SocijalnaPsihijatrija, 31* (4), 191-197.

Kumar, V., & Stracke, E. (2007). An analysis of written feedback on a PhD thesis. *Teaching in Higher Education, 12*(4), 461–470.

Kurtz-Costes, B., Helmke, L.A., & B. Ülkü-Steiner, B. (2006). Gender and doctoral studies: The perceptions of PhD students in an American university. *Gender & Education 18*(2), 137-55.

Kwan, B. (2010). An Investigation of Instruction in Research Publishing Offered in Doctoral Programs: The Hong Kong Case. *Higher Education: The International Journal of Higher Education and Educational Planning, 59*(1), 55-68.

Larcombe, W., McCosker, A., & O'Loughlin, K. (2007). Supporting Education PhD and DEd Students to Become Confident Academic Writers: An Evaluation of Thesis Writers' Circles. *Journal of University Teaching and Learning Practice* 4(1), 55-63.

Lavasani, M. G., Khezriazar, H., Amani, J., & Malahmadi, E. (2011). The role of academic self-efficacy and achievement goals in level of stress, anxiety, and depression of university students. *Journal of Psychology*, 14(4), 417-432.

Lavelle, E., & Bushrow, K. (2007). Writing approaches of graduate students. *Educational Psychology*, 27 (6), 807-822.

Lay, C., & Silverman, S. (1996). Trait procrastination, anxiety, and dilatory behavior. *Personality and Individual Differences*, 21(1), 61-67.

Lea, M.R., & Stierer, B. (Eds.). (2000). *Student Writing in Higher Education: New Contexts*. Buckingham: The Society for Research into Higher Education and Open University Press.

Lea, M.R., & Street, B.V. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education*, 23(2), 157-172.

Lee, E. (2005). The Relationship of Motivation and Flow Experience to Academic Procrastination in University Students. *Journal Of Genetic Psychology*, 166(1), 5-14.

Lee, A., & McKenzie, J. (2011). Evaluating doctoral supervision: tensions in eliciting students' perspectives. *Innovations in Education and Teaching International*, 48(1), 69-78.

Leming, J. S. (1977). *Doctoral programs as preparation for what? The professional training perspective*. Paper presented at the annual meeting of the American Educational Research Association, New York. (ERIC Document Reproduction Service No. ED 139 358).

- Lewis, R. (2005). *Finland, Cultural Lone Wolf*. Yarmuth, ME: Intercultural Press.
- Li, S., & Seale, C. (2007). Managing criticism in Ph.D. supervision: A qualitative case study. *Studies in Higher Education*, 32(4), 511–526.
- Lillis, T., & Curry, M. J. (2010). *Academic writing in a global context: The politics and practices of publishing in English*. London: Routledge
- Lonka, K. (2003). Helping doctoral students to finish their theses. In L. Björk, G. Bräuer, L. Rienecker, G. Ruhmann, & P. Stray Jørgensen (Eds.), *Teaching academic writing across Europe* (pp. 113–131). Dordrecht, The Netherlands: Kluwer University Press.
- Lonka, K., Chow, A., Keskinen, J., Hakkarainen, K., Sandström, N., & Pyhältö, K. (2014). How to measure PhD students' conceptions of academic writing – and are they related to well-being? *Journal of Writing Research*, 5(3), 245-269.
- Lonka, K., Sharafi, P., Karlgren, K., Masiello I., Nieminen, J., Birgegård, G., & Josephson, A. (2008). Development of MED NORD - A tool for measuring medical students' well-being and study orientations. *Medical Teacher*, 30, 72–79.
- Lovitts, B.E. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study*. Lanham, MD: Rowman & Littlefield.
- Lunsford, L. (2012). Doctoral Advising or Mentoring? Effects on Student Outcomes. *Mentoring & Tutoring: Partnership In Learning*, 20(2), 251-270.
- Maher, D., Seaton, L., McMullen, C., Fitzgerald, T., Otsuji, E., & Lee, A. (2008). Becoming and being writers': the experiences of doctoral students in writing groups. *Studies in continuing education*, 30(3), 263-275.

Mainhard, T., van der Rijst, R., van Tartwijk, J., & Wubbels, T. (2009). A Model for the Supervisor-Doctoral Student Relationship. *Higher Education: The International Journal Of Higher Education And Educational Planning*, 58(3), 359-373.

Mäkinen, J., Olkinuora, E., & Lonka, K. (2004). Students at risk: General study orientation and abandoning/prolonging the course of studies. *Higher Education*, 48(2), 173–188.

Mateos, M., & Solé, I. (2012). Undergraduate Students' Conceptions and Beliefs about Academic Writing. In M. Castelló, & C. Donahue. (Eds.), *University writing: Selves and Texts in Academic Societies*. Studies in Writing, 24 (pp. 435-451). Bingley, UK: Emerald.

Mansfield, K., Welton, A., Lee, P., & Young, M. D. (2010). The Lived Experiences of Female Educational Leadership Doctoral Students. *Journal Of Educational Administration*, 48(6), 727-740.

Martinsuo, M., & Turkulainen, V. (2011). Personal commitment, support and progress in doctoral studies. *Studies in Higher Education*, 36(1), 103-120.

Martos, F.J. (2005). Desafíos de la formación del postgrado en Iberoamérica en un mundo globalizado [Challenges of postgraduate training in Latin America in a Globalized World]. *Revista Mexicana de Psicología*, 22, 333–344.

Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99–113.

McAlpine, L. (2012). Identity-Trajectories: Doctoral Journeys from Past to Present to Future. *Australian Universities' Review*, 54(1), 38-46.

McAlpine, L., & Amundsen, C. (2011). Challenging the taken-for-granted: How research analysis might inform pedagogical practices and institutional policies related to doctoral education. *Studies in Higher Education*, 37(7), 1-12.

Mestre, V.V., & Pérez-Delgado, E.E. (1991). La psicología en España a través de las tesis doctorales sobre psicología en las universidades españolas (1976–1989) [Psychology in Spain using doctoral theses on psychology in Spanish universities (1976-1989)]. *Revista de Historia de la Psicología*, 12(2), 59-72.

Meyer, D. K., & Turner, J. C. (2002). Discovering emotion in classroom motivation research. *Educational Psychologist*, 37, 107-114.

Miki, Y., Gregg, M.F., Arimoto, A., Nagata, S., & Murashima, S. (2012). Evaluation of doctoral nursing programs by doctoral students in Japan: Cross-sectional questionnaire survey. *Japan Journal of Nursing Science*, 9(2), 160-168.

Miller, D.C. (1991). *Handbook of research design and social measurement*. London: Sage.

Miller, J. K., & Lambert-Shute, J. (2009). Career Aspirations and Perceived Level of Preparedness among Marriage and Family Therapy Doctoral Students. *Journal Of Marital And Family Therapy*, 35(4), 466-480.

Mills, J., & Blankstein, K.R. (2000). Perfectionism, intrinsic vs extrinsic motivation, and motivated strategies for learning: A multidimensional analysis of university students. *Personality and Individual Differences*, 29(6), 1191-1204.

Miquelon, P., Vallerand, R.J., Grouzet, F.M.E., & Cardinal, G. (2005). Perfectionism, Academic Motivation, and Psychological Adjustment: An Integrative Model. *Personality and Social Psychology Bulletin*, 31(7), 913-924.

Mitchelson, J.K., & Burns, L.R. (1998). Career mothers and perfectionism: Stress at work and at home. *Personality and Individual Differences* 25(3), 477-485.

Moore, K.A. (2010). Gender and the differential effects of active and passive perfectionism on mathematics anxiety and writing anxiety. *Cognition, Brain, Behavior: An Interdisciplinary Journal*, 14(4). 333-345.

Morrison, E., Rudd, E., Zumeta, W., & Nerad, M. (2011). What Matters for Excellence in PhD Programs? Latent Constructs of Doctoral Program Quality Used by Early Career Social Scientists. *Journal of Higher Education*, 82(5), 535-563.

Morton, M., & Thornley, G. (2001). Experiences of doctoral students in mathematics in New Zealand. *Assessment & Evaluation In Higher Education*, 26(2), 113-126.

Moyano, M., Domínguez, C., & Casal, G. (2006). Análisis de la productividad científica de la Psiquiatría española a través de las tesis doctorales en la base de datos TESEO (1993-2002) [Analysis of the scientific productivity of the Spanish Psychiatry through doctoral theses in TESEO data base (1993-2003)]. *International Journal of Psychology & Psychological Therapy*, 6(1), 111-120.

Murakami-Ramallo, E., Piert, J., & Militello, M. (2008). The wanderer, the chameleon, and the warrior - Experiences of doctoral students of color developing a research identity in educational administration. *Qualitative inquiry*, 14(5), 806-834.

Musi-Lechuga, B., Olivas-Avila, J., & Castro, A. (2011). Productividad de los programas de doctorado en Psicología con Mención de Calidad en artículos de revistas incluidas en el Journal Citation Reports [Productivity of doctoral programs in Psychology with Quality Mention in journal articles included in Journal Citation Reports]. *Psicothema*, 23(3), 343-348.

Musi-Lechuga, B., Olivas-Avila, J., & Buela-Casal, G. (2009). Producción científica de los programas de Doctorado en Psicología Clínica y de la Salud de España [Scientific productivity of doctorate programs in Clinical and Health Psychology in Spain]. *International Journal of Clinical and Health Psychology*, 9(1), 161-173.

Musi-Lechuga, B., Olivas-Ávila, J., Guillén-Riquelme, A., & Castro, Á. (2011). Relación entre productividad y eficiencia de los programas de doctorado en psicología [Relationship between productivity and efficiency of doctoral programs in psychology]. *Revista Latinoamericana De Psicología*, 43(2), 297-305.

- Musi-Lechuga, B., Olivas-Ávila, J., & Vázquez, Á. (2011). Productividad en tesis de los programas de doctorado en psicología con mención de calidad [Productivity in doctoral dissertations of doctoral programs in psychology with quality mention]. *Revista Mexicana De Psicología*, 28(1), 93-100.
- Nagata, S., Gregg, M.F., Miki, Y., Arimoto, A., Murashima, S., & Kim, M.J. (2012). Evaluation of doctoral nursing education in Japan by students, graduates, and faculty: A comparative study based on a cross-sectional questionnaire survey. *Nurse Education Today* 32, 361–367.
- Nayeri, N.D., Negarandeh, R., Vaismoradi, M., Ahmadi, F., & Faghihzadeh, S. (2009). Burnout and productivity among Iranian nurses. *Nursing & Health Sciences*, 11(3), 263-270.
- Nelson, N.G., Dell’Oliver, C., Koch, C., & Buckler, R. (2001). Stress, coping, and success among graduate students in clinical psychology. *Psychological Report*, 88, 759–776.
- Nettles, M. T. (1990). Success in doctoral programs - experiences of minority and white students. *American Journal of Education*, 98(4), 494-522.
- Nettles, M.T., & Millett, C.M. (2006). *Three magic letters: Getting to Ph.D.* Baltimore, MD: The Johns Hopkins University Press.
- Nilsson, J. E., Butler, J., Shouse, S., & Joshi, C. (2008). The Relationships among Perfectionism, Acculturation, and Stress in Asian International Students. *Journal Of College Counseling*, 11(2), 147.
- NSF/NIH/USED/USDA/NEH/NASA. (2012). Survey of Earned Doctorates.
- Official Statistics of Finland, OSF. (2013). *Statistics Finland*. Helsinki. Last visit 30th of December 2013. Available at: http://www.stat.fi/til/aiheet_en.html

Ohayon, M.N., & Partinen, M. (2002). Insomnia and global sleep dissatisfaction in Finland. *J Sleep Res*, *11*(4), 339-46.

Onwuegbuzie, A. J. (1997). Writing a research proposal: the role of library anxiety, statistics anxiety, and composition anxiety. *Library & Information Science Research*, *19*, 5-33.

Onwuegbuzie, A.J. (1998). The relationship between writing anxiety and learning styles among graduate students. *Journal of College Student Development*, *39* (6), 589-598.

Onwuegbuzie, A.J. (1999). Writing apprehension among graduate students: Its relationship to self-perceptions. *Psychological Reports*, *84*(3, Pt 1), 1034-1039.

Onwuegbuzie, A.J. (2000). Academic procrastination and perfectionistic tendencies among graduate students. *Journal of social behavior and personality*, *15*(5),103-109.

Onwuegbuzie, A.J. (2004). Academic procrastination and statistics anxiety. *Assessment & Evaluation in Higher Education*, *29*(1), 3-19.

Onwuegbuzie, A.J., & Collins, K. (2001). Writing apprehension and academic procrastination among graduate students. *Perceptual and Motor Skills*, *92*(2), 560-562.

Onwuegbuzie, A.J., & Daley, C. (1999). Perfectionism and statistics anxiety. *Personality and Individual Differences*, *26*(6), 1089-1102.

Paglis, L. L., Green, S. G., & Bauer, T. N. (2006). Does adviser mentoring add value? A longitudinal study of mentoring and doctoral student outcomes. *Research in Higher Education*, *47*(4), 451-476.

Pajares, F., Miller, M., & Johnson, M. (1999). Gender differences in writing self-beliefs of elementary school students. *Journal of Educational Psychology*, *91*, 50-61.

- Pajares, F., Britner, S. L., & Valiante, G. (2000). Relation between achievement goals and self beliefs of middle school students in writing and science. *Contemporary Educational Psychology, 25*, 406–422.
- Park, H., Choi, B., Nam, S., & Lee, S. (2011). The Role of Career Stress in the Relationship between Maladaptive Perfectionism and Career Attitude Maturity in South Korean Undergraduates. *Journal Of Employment Counseling, 48*(1), 27-36.
- Park, N., & Huebner, E. S. (2005). A cross-cultural study of the levels and correlates of life satisfaction among adolescents. *Journal of Cross-Cultural Psychology, 36*, 444–456.
- Parker, R. (2009). A learning community approach to doctoral education in the social sciences. *Teaching in Higher Education, 14*(1), 43-54.
- Patton, M.Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- Pearson, M., Cumming, J., Evans, T., Macauley, P., & Ryland, K. (2011). How shall we know them? Capturing the diversity of difference in Australian doctoral candidates and their experiences. *Studies in Higher Education, 36*(5), 527-542.
- Pelechano, V. (2002). ¿Valoración de la actividad científica en Psicología? ¿Pseudoproblema, sociologismo o idealismo? [Evaluating the scientific activity in Psychology? Pseudoproblem, Sociologism or idealism?]. *Análisis y Modificación de Conducta, 28*, 323-362.
- Pyhältö, K., Stubb, J., & Lonka, K. (2009). Developing scholarly communities as learning environments for doctoral students. *International Journal for Academic Development, 14*(3), 221–232.
- Pyhältö, K., Toom, A., Stubb, J., & Lonka, K. (2012). Challenges of Becoming a Scholar: A Study of Doctoral Students' Problems and Well-Being. *ISRN Education, 2012*, 1-12.

Rice, K. G., Leever, B. A., Christopher, J., & Porter, J. (2006). Perfectionism, Stress, and Social (Dis)Connection: A Short-Term Study of Hopelessness, Depression, and Academic Adjustment among Honors Students. *Journal Of Counseling Psychology*, 53(4), 524-534.

Rinck, F., & Boch, F. (2012). Enunciative Strategies and Expertise Levels in Academic Writing: How Do Writers Manage Point of View and Sources? In M. Castelló, C. Donahue (Eds.), *University Writing: Selves and Texts in Academic Societies*. Studies in Writing, 24 (pp.111-127). Emerald Group Publishing Limited.

Rodarte-Luna, B., & Sherry, A. (2008). Sex differences in the relation between statistics anxiety and cognitive/learning strategies. *Contemporary Educational Psychology*, 33(2), 327-344.

Rodríguez, Y.G. (2003). Doctoral studies in psychology in Spain. *European Psychologist*, 8(1), 28-33.

Rose, G. L. (2003). Enhancement of mentor selection using the Ideal Mentor Scale. *Research in Higher Education*, 44, 473-494.

Rose, M. (1980). Rigid Rules, Inflexible Plans, and the Stifling of Language: A Cognitivist Analysis of Writer's Block. *College Composition And Communication*, 31(4), 389-400.

Rothblum, E. D., Solomon, L.J., & Murakami, J. (1986). Affective, Cognitive, and Behavioral Differences Between High and Low Procrastinators. *Journal Of Counseling Psychology*, 33(4), 387-94.

Rudd, E. (1986). The Drop-Outs and the Dilatory on the Road to the Doctorate. *Higher Education In Europe*, 11(4), 31-36.

Sachs, J. (2002). A path model for students' attitude to writing a thesis. *Scandinavian Journal of Educational Research*, 46(1), 99-108.

Sainio, J. (2010). Asiantuntijana työmarkkinoille - Vuosina 2006 ja 2007 tohtorin tutkinnon suorittaneiden työllistyminen ja heidän mielipiteitään tohtorikoulutuksesta [Experts for the labour market - The employment of doctors who earned their doctoral degree in 2006-2007 and their perceptions of doctoral training]. Tampere: Kirjapaino Hermes Oy.

Salanova, M., Llorens, S., & Schaufeli, W.B. (2011). "Yes, I can, I feel good, and I just do it!" On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology: An International Review*, 60(2), 255-285.

Sallee, M.W. (2011). Performing Masculinity: Considering Gender in Doctoral Student Socialization. *Journal of higher education*, 82(2), 187-216.

Sato, T., & Hodge, S.R. (2009). Asian International Doctoral Students' Experiences at Two American Universities: Assimilation, Accommodation, and Resistance. *Journal of diversity in Higher Education*, 2(3), 136-148.

Sawyer, K. (2009). Writing as a collaborative act. In S.B. Kaufman & J.C. Kaufman (Eds.), *The psychology of creative writing* (pp. 166-179). Cambridge: Cambridge University Press.

Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the Things We Do: A Grounded Theory of Academic Procrastination. *Journal Of Educational Psychology*, 99(1), 12-25.

Scott, C., & Rockwell, S. (1997). The effect of communication, writing, and technology apprehension on likelihood to use new communication technologies. *Communication Education*, 46, 44-62.

Seagram B., Gould J., & Pyke S. (1998). An investigation of gender and other variables on time to completion of doctoral degrees. *Research in Higher Education*, 39(3), 319-335.

- Sirois, F.M., & Tosti, N. (2012). Lost in the moment? An investigation of procrastination, mindfulness, and well-being. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 30(4), 237-248.
- Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*, 31, 503-509.
- Spada, M.M., Hiou, K., & Nikcevic, A.V. (2006). Metacognitions, Emotions, and Procrastination. *Journal of Cognitive Psychotherapy: An International Quarterly*, 20, 319-326.
- Speirs-Neumeister, K. L. (2004). Understanding the Relationship between Perfectionism and Achievement Motivation in Gifted College Students. *Gifted Child Quarterly*, 48(3), 219.
- Spence, D. J., & Usher, E. L. (2007). Engagement with Mathematics Courseware in Traditional and Online Remedial Learning Environments: Relationship to Self-Efficacy and Achievement. *Journal Of Educational Computing Research*, 37(3), 267-288.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133, 65-94.
- Stubb, J., Pyhältö, K., & Lonka, K. (2011). Balancing between Inspiration and Exhaustion: PhD students' experienced socio-psychological well-being. *Studies in Continuing Education*, 33(1), 33-55.
- Stubb, J., Pyhältö, K., & Lonka, K. (2012). The Experienced Meaning of Working with a PhD Thesis. *Scandinavian Journal of Educational Research*, 56(4), 439-456.
- Surratt, C. K. (2006). Creation of a graduate oral/written communication skills course. *American Journal of Pharmaceutical Education*, 70(1), Article 5.

Taris, T.W., & Schreurs, P.J.G. (2009). Well-being and organizational performance: An organizational-level test of the happy-productive worker hypothesis. *Work & Stress*, 23(2), 120-130.

Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling. *Psychological Science*, 8(6), 454-458.

Toews, J.A., Lockyer, J.M., Dobson, D.J.G., & Brownell, A.K.W. (1993). Stress among residents, medical students and graduate science (MSc/PhD) students. *Academic Medicine* 68, 46-48.

Toews, J.A., Lockyer, J.M., Dobson, D.J.G., Simpson, E., Brownell, A.K.W., Brenneis, F.,... Cohen, G.S. (1997). Analysis of stress levels among medical students, residents, and graduate students at four Canadian schools of medicine. *Academic Medicine* 72: 997-1002.

Torralbo, M., Fernández Cano, A., Rico, L., Maz, A., & Gutiérrez, M. (2003). Tesis Doctorales Españolas En Educación Matemática [Doctoral theses (Ph, D,) on Maths education]. *Enseñanza de las Ciencias Revista de investigación y experiencias didácticas*, 21(2), 295-306.

Torrance, M.S., & Thomas, G.V. (1994). The development of writing skills in doctoral research students. In R.G. Burgess (Ed.), *Postgraduate Education and Training in the Social Sciences. Processes and Products* (pp. 105-123). London: Jessica Kingsley.

Torrance, M., Thomas, G.V., & Robinson, E.J. (1992). The writing experiences of social science research students. *Studies in Higher Education*, 17(2), 155-167.

Torrance, M., Thomas, G.V., & Robinson, E.J. (1993). Training in thesis writing: an evaluation of three conceptual orientations. *British Journal of Educational Psychology*, 63, 170-184.

- Torrance, M., Thomas, G.V., & Robinson, E.J. (1994). The writing strategies of graduate research students in the social sciences. *Higher Education*, 27(3), 379-92.
- Tynjälä, J., Kannas, L., & Välimaa, R. (1993). How young Europeans sleep. *Health Educ Res*, 8(1), 69-80.
- Ülkü-Steiner, B., Kurtz-Costes, B., & Kinlaw, C.R. (2000). Doctoral student experiences in gender-balanced and male-dominated graduate programs. *Journal of Educational Psychology*, 92(2), 296-307.
- van Hout, H. (1991). A Causal Model for Assessing Problems of Dutch Research Assistants (PhD-Students). ASHE Annual Meeting Paper.
- Vallejo-Ruiz, M., Fernandez-Cano, A., Torralbo, M., Maz, A., & Rico, L. (2008). History of Spanish Mathematics Education Focusing on PhD Theses. *International Journal of Science and Mathematics Education*, 6(2), 313-327.
- Van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences*, 35, 1401-1418.
- Vancouver, J.B., & Kendall, L.N. (2006). When self-efficacy negatively relates to motivation and performance in a learning context. *Journal of Applied Psychology*, 91(5), 1146-1153.
- Vieira, E. R., & Grantham, S. (2011). University Students Setting Goals in the Context of Autonomy, Self-Efficacy and Important Goal-Related Task Engagement. *Educational Psychology*, 31(2), 141-156.
- Villalón, R., & Mateos, M. (2009). Concepciones del alumnado de secundaria y universidad sobre la escritura académica [Secondary and university students' conceptions about academic writing]. *Infancia y Aprendizaje*, 32(2), 219-232.

Villalón, R., Mateos, M., & Cuevas, I. (in press). High school boys' and girls' writing conceptions and writing self-efficacy beliefs: what is their role in writing performance? *Educational Psychology: An International Journal of Experimental Educational Psychology*.

Villarroya, A., Barrios, M., Borrego, A., & Frías, A. (2008). PhD theses in Spain: A gender study covering the years 1990-2004. *Scientometrics*, 77(3), 469-483.

Walsh, J.J., & Ugumba-Agwunobi, G. (2002). Individual differences in statistics anxiety: The roles of perfectionism, procrastination and trait anxiety. *Personality and Individual Differences*, 33(2), 239-251.

Wang, T., & Li, L. Y. (2011). 'Tell me what to do' vs. 'guide me through it': Feedback experiences of international doctoral students. *Active Learning In Higher Education*, 12(2), 101-112.

Wangmo, T., Ewen, H.H., Webb, A.K., Teaster, P.B., & Russell Hatch, L. (2009). Mentoring in Gerontology Doctoral Education: The Role of Elders in Mentoring Gerontologists. *Gerontology & Geriatrics Education*, 30(1), 47-60.

Webb, M.S., Njoku, B.P., & Allen, L.C. (1996). Doctoral students' perception of institutional and program quality. *College and University*, 71(3), 11-17.

Webb, A.K., Wangmo, T., Ewen, H.H., Teaster, P.B., & Hatch, L.R. (2009). Peer and Faculty Mentoring for Students Pursuing a PhD in Gerontology. *Educational gerontology*, 35(12), 1089-1106.

Weidman, J.C., & Stein, E.L. (2003). Socialization of doctoral students to academic norms. *Research in Higher Education*, 44(6), 641-656.

White, M., & Bruning, R. (2005). Implicit Writing Beliefs and Their Relation to Writing Quality. *Contemporary Educational Psychology*, 30(2), 166-189.

Wolters, C. A. (2003). Understanding Procrastination from a Self-Regulated Learning Perspective. *Journal Of Educational Psychology, 95*(1), 179-87.

Xifra, J., & Castillo, A. (2006). Forty years of doctoral public relations research in Spain: A quantitative study of dissertation contribution to theory development. *Public relations review, 32*(3), 302-308.

Yik, M., Russell, J., & Barrett, L. (1999). Structure of self-reported current affect: Integration and beyond. *Journal of Personality and Social Psychology, 77*(3), 600-619.

Yik, M., Russell, J., & Steiger, J. (2011). A 12-point circumplex structure of core affect. *Emotion, 11*, 705-731.

Ylijoki, O-H. (2001). Master's thesis writing from a narrative approach. *Studies in Higher Education, 26*, 21–34.

Yondem, Z.D. (2007). Performance anxiety, dysfunctional attitudes and gender in university music students. *Social Behavior and Personality, 35*(10), 1415-1426.

Zhang, Y., Gan, Y., & Cham, H. (2007). Perfectionism, academic burnout and engagement among Chinese college students: A structural equation modeling analysis. *Personality and Individual Differences, 43*(6), 1529-1540.

Zimak, E.H., Edwards, K.M., Johnson, S.M., & Suhr, J. (2011). Now or later? An empirical investigation of when and why students apply to clinical psychology PhD programs. *Teaching of Psychology, 38* (2)118-121.

APPENDICES

1a) Describe your PhD process! What are the key events or turning points that have had significant effect on your process?

1b) What does working with the thesis mean to you?

2) Doctoral student faces many problematic situations and challenges while working with his/her thesis. What kind of problems, questions or challenges do you find typical for the thesis-process? Describe a few.

a) _____

b) _____

c) _____

In your opinion, what are the main reasons for these problems?

3) Have you ever considered interrupting your doctoral studies? Yes No
If you have, what were the reasons? _____

4) Do you feel that you would need some extra support in your doctoral studies? Yes No
If you do, what kind of support would it be? Why? _____

5) How do you see your own role in your the scientific community as a doctorate?

6) According to your opinion, what does the doctoral training require from the student?

7a) Describe a good supervisor! _____

7b) Give an example about a good supervision situation. _____

8) What kind of competences should a PhD. have? _____

Evaluate following statements from your own perspective.

This part includes statements about stress and exhaustion within Doctoral studies.

	Do not agree			Fully agree	
9) My workload is often too high.	1	2	3	4	5
10) I feel exhausted.	1	2	3	4	5
11) Doctoral studies are too stressful for me.	1	2	3	4	5
12) I worry about the thesis in my free time.	1	2	3	4	5
13) It is difficult for me to find meaning in my doctoral studies.	1	2	3	4	5

14) I am not motivated by the content of my studies.	1	2	3	4	5
15) I often fear that I will fail in my doctoral studies.	1	2	3	4	5
16) I am stressed out by the workload, dead-lines and competition in doctoral studies.	1	2	3	4	5
17) I often have to force myself to work for my thesis.	1	2	3	4	5

Stress means a situation in which a person feels tense, restless, nervous, or anxious or is unable to sleep because his/her mind is troubled all the time.

	Not at all			Very much	
18) Do you feel this kind of stress these days?	1	2	3	4	5

This part includes statements about studying circumstances.

	Do not agree			Fully agree	
19) I am treated respectfully.	1	2	3	4	5
20) I worry, that I do not qualify for Doctoral degree.	1	2	3	4	5
22) Doctoral Education creates isolation and anonymity among students.	1	2	3	4	5
23) Doctoral- studies stimulate my personal development.	1	2	3	4	5
24) The professional role endorsed by Doctoral studies conflicts my personal values.	1	2	3	4	5
25) My supervisors are supportive and I get personal attention from them.	1	2	3	4	5
26) Relationships between doctoral-students are very competitive.	1	2	3	4	5
27) I find my career choice, that is_____ satisfying.	1	2	3	4	5
28) Doctoral Education enhances a cold and impersonal attitude.	1	2	3	4	5
29) I am worried about my professional career.	1	2	3	4	5
30) I am proud of my profession.	1	2	3	4	5
31) I am treated worse than others because of my sex.	1	2	3	4	5
32) I am worried about the stress-level in my job after my doctoral degree.	1	2	3	4	5

33) I am treated worse than others because of my ethnic background. 1 2 3 4 5

34) I feel that doctoral education provides adequate preparation for my profession. 1 2 3 4 5

Do not agree

Fully agree

35) The pace of doctoral studies is too high. 1 2 3 4 5

36) I often get constructive feedback on my knowledge and skills. 1 2 3 4 5

37) In which phase of doctoral studies you are at the moment? _____

This part includes statements about writing the thesis.

Do not agree

Fully agree

38) It is useful to get other people's comments on texts. 1 2 3 4 5

39) When I write I am concerned about whether the reader understands my text. 1 2 3 4 5

40) I often postpone writing tasks until the last moment. 1 2 3 4 5

41) Writing is a creative activity. 1 2 3 4 5

42) I find it difficult to write, because I am too critical. 1 2 3 4 5

43) My previous writing experiences are mostly negative. 1 2 3 4 5

44) I write regularly regardless of the mood I am in. 1 2 3 4 5

45) I produce a large number of finished texts. 1 2 3 4 5

46) Without deadlines I would not produce anything. 1 2 3 4 5

47) I sometimes get completely stuck if I have to produce texts. 1 2 3 4 5

48) I find it difficult to start writing. 1 2 3 4 5

49) It is important to have support from a group or a colleague when writing.	1	2	3	4	5
50) I find it easier to express myself in other ways than writing.	1	2	3	4	5
51) I only write when the situation is peaceful enough.	1	2	3	4	5
52) The skill of writing is something we are born with; it is not possible for all of us to learn it.	1	2	3	4	5
	Do not agree			Fully agree	
53) I find it difficult to hand over my texts, because they never seem complete.	1	2	3	4	5
54) I start writing only if it is absolutely necessary.	1	2	3	4	5
55) I hate writing.	1	2	3	4	5
56) I am a regular and productive writer.	1	2	3	4	5
57) I could revise my texts endlessly.	1	2	3	4	5
58) I write whenever I have the chance.	1	2	3	4	5
59) Writing is a skill, which cannot be taught.	1	2	3	4	5
60) Writing is difficult because the ideas I produce seem stupid.	1	2	3	4	5
61) Rewriting texts several times is quite natural.	1	2	3	4	5
62) Writing often means new creating ideas and ways of expressing oneself.	1	2	3	4	5
63) Writing develops thinking.	1	2	3	4	5

This part includes questions concerning your background information.

64) Year of birth: _____

65) Your gender: Female Male

66) Do you have children? Yes No

67) How many? _____

68) Native language? _____

69) Language of the thesis _____

70) Major in the master's degree: _____

71) Major in the doctoral studies: _____

72) When did you start your doctoral studies? _____

73) The estimated graduation year: _____

74) Form of doctoral thesis: Monography
Collection of articles

75) I am doing doctoral studies as a: Full time doctoral student
Part time doctoral student

76) How are you working on your thesis? Mainly on my own
As much on my own as in research team
Mainly in a research team

77) Principal source of income during this year: Doctoral student place
A post at the university e.g. assistant
A post in the research project
A scholarship by foundation
No funding at the moment
Some other form of funding, what:

78) At the moment I have funding for my thesis for _____ time

79) Has some situation in life delayed your doctoral studies? Yes No

80) If yes, what? _____

THANK YOU FOR YOUR ANSWERS!

Cuestionario para doctorandos/as

A continuación encontrarás una serie de preguntas sobre tu proceso como doctorando/a. Como podrás ver, no hay respuestas correctas o incorrectas, sino que se trata simplemente que expreses tu punto de vista con claridad. Ésta es una etapa importante en la vida de cualquier doctorando/a y nos interesa conocer cómo se aborda y cuáles son las dificultades y las satisfacciones que comporta para sus protagonistas. Disponer de esta información nos puede ayudar a entender mejor estos estudios y ajustar la ayuda o la tutoría que el profesorado ofrece a lo largo del proceso. El cuestionario es anónimo, por lo que te agradeceremos enormemente que respondas con sinceridad y de manera directa tanto las cuestiones abiertas como las preguntas de opción múltiple.

*Obligatorio

1a) Describe tu proceso como doctorando/a. ¿Cuáles son los momentos clave o puntos de inflexión que crees que han tenido efectos significativos en tu proceso? *

1b) ¿Qué significa, para ti, hacer la tesis doctoral? *

2a) Todos los/las doctorandos/as se afrontan con situaciones problemáticas y retos mientras hacen su tesis. ¿Qué tipo de problemas, cuestiones o retos te has encontrado? Comenta unos cuantos *

(Al menos tres, a poder ser)

2b) Desde tu punto de vista, ¿cuáles son las causas de estos problemas? *

3a) ¿Te has planteado alguna vez interrumpir los estudios de doctorado? *

- Sí
- No

3b) Si te lo has planteado, ¿por qué razones? *

Si has marcado NO escribe un guión (-)

4a) ¿Crees que necesitas ayuda extra en tus estudios de doctorado? *

- Sí
- No

4b) Si has marcado «sí», ¿qué tipo de ayuda necesitas? ¿Por qué? *

Si has marcado NO escribe un guión (-)

5) ¿Cómo ves tu papel como doctorando/a en tu comunidad científica? *

6) Según tu punto de vista, ¿qué es lo que los estudios de doctorado exigen al/ a la doctorando/a? *

7a) Describe las características que definen un/a buen/a director/a de tesis. *

7b) Pon un ejemplo de situación que muestre un buen proceso de guía, de ayuda o de dirección. *

8) ¿Qué competencias ha de tener un/a doctorando/a? *

Valora las afirmaciones siguientes desde tu perspectiva:

9) Mi trabajo a menudo es excesivo. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

10) Me siento agotado/a. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

11) Los estudios de doctorado son muy estresantes. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

12) Me preocupo por la tesis en mi tiempo libre. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

13) Me resulta difícil encontrar sentido a mis estudios de doctorado. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

14) No me siento motivado/a por el contenido de mis estudios. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

15) A menudo tengo miedo de no ser capaz de llevar a cabo mis estudios de doctorado. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

16) Estoy estresado/a por la carga de faena, las fechas de entrega y la competitividad del doctorado. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

17) A menudo me tengo que forzar a trabajar en la tesis. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

El estrés es una situación en la cual la persona se siente inquieta, tensa, nerviosa; está angustiada, no se puede relajar o no puede dormir porque está continuamente preocupada.

18) ¿Sientes este tipo de estrés últimamente? *

1 2 3 4 5

No, en absoluto Mucho

Esta parte incluye algunas preguntas sobre las circunstancias y el contexto de tus estudios:

19) Soy tratado/a de manera respetuosa. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

20) Me preocupa no estar cualificado/a para el título de doctor/a. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

21) Los estudios de doctorado crean aislamiento y anonimato entre los/las doctorandos/as. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

22) El doctorado estimula mi desarrollo personal. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

23) El rol que he de adoptar en mis estudios de doctorado entra en conflicto con mis valores personales. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

24) El profesorado y/o profesionales que me llevan la tesis son atentos y me ofrecen ayuda si lo necesito. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

25) Las relaciones entre los/las doctorandos/as son muy competitivas. *

1 2 3 4 5

Nada de acuerdo Completamente en desacuerdo

26) La elección de mi carrera profesional me satisface. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

27) Los estudios de doctorado favorecen una actitud fría e impersonal. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

28) Estoy preocupado/a por mi carrera profesional. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

29) Me siento orgulloso/a de mi profesión. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

30) Me siento discriminado/a por razones de género. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

31) Estoy preocupado/a por el nivel de estrés en mi trabajo una vez acabado el doctorado.*

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

32) Me siento discriminado/a a causa de mi país de origen. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

33) Creo que los estudios de doctorado ofrecen una preparación adecuada para mi profesión. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

34) El ritmo del doctorado es demasiado acelerado. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

35) A menudo recibo feedback constructivo sobre mis conocimientos y habilidades. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

36) ¿En qué fase de tu doctorado estás ahora? *

Formación previa (cursando asignaturas)/ Delimitación del objeto de estudio/ Preparación del trabajo de campo/ Recogida de datos/ Análisis de datos/ Redacción de los resultados/ Elaboración de las conclusiones/ Preparación de la defensa...Si se trata de un estudio teórico intenta explicar también el punto en el que te encuentras. En todo caso, adapta tu respuesta a las circunstancias de tu tesis.

Esta parte incluye afirmaciones sobre la escritura en el doctorado y productos derivados (artículos, comunicaciones, pósters, etc.):

37) Es útil recibir comentarios de otras personas sobre el texto que escribo. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

38) Cuando escribo me preocupo por si el lector entenderá mi texto. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

39) A menudo postergo la tarea de escribir. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

40) La escritura es una actividad creativa. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

41) Encuentro difícil escribir porque soy demasiado crítico/a. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

42) Mis experiencias previas de escritura son mayoritariamente negativas. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

43) Escribo de manera regular sin preocuparme del estado de ánimo que tenga. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

44) Produzco un gran número de textos acabados. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

45) Sin fechas límite no escribiría nada. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

46) A veces me siento completamente encallado/a si he de producir textos. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

47) Me resulta difícil comenzar a escribir. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

48) Es importante tener la ayuda de un grupo o de un/a colega cuando se escribe. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

49) Me resulta más fácil expresarme de otra manera que no sea mediante la escritura. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

50) Sólo escribo cuando la situación es suficientemente tranquila. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

51) La habilidad de escribir es algo con lo que nacemos; no todo el mundo lo puede aprender. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

52) Me resulta difícil entregar mis textos porque nunca parecen acabados. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

53) Me pongo a escribir tan solo si es absolutamente necesario. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

54) Odio escribir. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

55) Soy un/a escritor/a regular y productivo/a. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

56) Podría revisar mis textos indefinidamente. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

57) Escribo siempre que tengo ocasión. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

58) La escritura es una habilidad que no puede ser enseñada. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

59) Escribir es difícil porque las ideas que tengo son muy simples. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

60) Reescribir los textos distintas veces es bastante normal. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

61) Escribir a menudo implica generar nuevas ideas y formas de expresarse. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

62) La escritura desarrolla el pensamiento. *

1 2 3 4 5

Nada de acuerdo Completamente de acuerdo

Por favor, escribe los datos siguientes relativos a tus datos personales

País: *

Si tu país de origen no es España pero gran parte de tus estudios pre-universitarios los has cursado en el estado español, indica entonces España

63) Edad: *

64) Género: *

Hombre

Mujer

65) ¿Tienes hijos? *

66) Lengua materna: *

67) Lengua de la tesis: *

68) Título de licenciatura: *

69) Título de máster o denominación de estudios de doctorado:

70) ¿Cuándo comenzaste los estudios de doctorado? (incluyendo la parte formativa) *

71) ¿Cuándo calculas que leerás la tesis? *

Escoge la opción que más se acerque

72) Formato de la tesis doctoral: *

Monografía

Artículos

Aún no lo he decidido

73) Actualmente sigo el doctorado como: *

Doctorando/a a tiempo completo

Doctorando/a a tiempo parcial

Aún no lo he decidido (estoy en el inicio)

74) ¿Cómo estás haciendo la tesis? *

De manera individual

De manera individual pero en un equipo

Trabajando en equipo

75) Fuente de ingresos durante el curso: *

Se puede responder más de una opción si es necesario

- No tengo
- Trabajo como ayudante en la universidad
- Becario/a de investigación
- Otras becas
- Trabajo
- Otro:

76) Tengo ingresos para hacer la tesis hasta... *

(Tiempo aproximado: 5 meses, 2 años...)

77) ¿Alguna situación vital ha retrasado tus estudios de doctorado? *

- Sí
- No

78) Si es que sí, ¿cuál? *

Si has marcado NO escribe un guión (-)

Nombre de la universidad (no la facultad) donde haces el programa doctoral *

En el caso de estar adherido a un parque científico y tecnológico, un centro del CSIC u otro centro de investigación, especifícalo

¡GRACIAS POR TU PARTICIPACIÓN!

Qüestionari per a doctorands/-es

A continuació trobaràs una sèrie de preguntes sobre el teu procés com a doctorand/a. Com podràs veure, no hi ha respostes correctes o incorrectes, sinó que es tracta simplement que expressis el teu punt de vista amb claredat. Aquesta és una etapa important en la vida de qualsevol doctorand/a i ens interessa conèixer com s'aborda i quines són les dificultats i les satisfaccions que comporta per als seus protagonistes. Disposar d'aquesta informació ens pot ajudar a entendre millor aquests estudis i ajustar l'ajuda o la tutoria que el professorat ofereix al llarg del procés. El qüestionari és anònim, amb la qual cosa t'agraïrem enormement que responguis amb sinceritat i de manera directa tant les qüestions obertes com les preguntes d'opció múltiple.

*Obligatori

1a) Descriu el teu procés com a doctorand/a. Quins són els moments clau o punts d'inflexió que creus que han tingut efectes significatius en el teu procés? *

1b) Què significa, per a tu, fer la tesi doctoral? *

2a) Tots els/les doctorands/es s'enfronten amb situacions problemàtiques i reptes mentre fan la tesi. Quin tipus de problemes, qüestions o reptes t'has trobat? Comenta'n uns pocs. *

(almenys tres, a poder ser)

2b) Des del teu punt de vista, quines són les causes d'aquests problemes? *

3a) T'has plantejat alguna vegada interrompre els estudis de doctorat? *

- Sí
- No

3b) Si t'ho has plantejat, per quines raons? *

Si has marcat NO escriu un guionet (-)

4a) Creus que necessites ajuda extra en els teus estudis de doctorat? *

- Sí
- No

4b) Si has marcat «sí», quina mena d'ajuda necessites? Per què? *

Si has marcat NO escriu un guionet (-)

5) Com veus el teu paper com a doctorand/a en la teva comunitat científica? *

6) Segons el teu punt de vista, què és el que els estudis de doctorat exigeixen al/a la doctorand/a? *

7a) Descriu les característiques que defineixen un/a bon/a director/a de tesi. *

7b) Posa un exemple de situació que mostri un bon procés de guia, d'ajuda o de direcció.*

8) Quines competències ha de tenir un/a doctorand/a? *

Valora les afirmacions següents des de la teva perspectiva:

9) El meu treball sovint és excessiu. *

1 2 3 4 5

Gens d'acord Completament d'acord

10) Em sento esgotat/-ada. *

1 2 3 4 5

Gens d'acord Completament d'acord

11) Els estudis de doctorat són molt estressants. *

1 2 3 4 5

Gens d'acord Completament d'acord

12) Em preocupo per la tesi en el meu temps lliure. *

1 2 3 4 5

Gens d'acord Completament d'acord

13) Em resulta difícil trobar sentit als meus estudis de doctorat. *

1 2 3 4 5

Gens d'acord Completament d'acord

14) No em sento motivat/-ada pel contingut dels meus estudis. *

1 2 3 4 5

Gens d'acord Completament d'acord

15) Sovint tinc por de no sortir-me'n en els meus estudis de doctorat. *

1 2 3 4 5

Gens d'acord Completament d'acord

16) Estic estressat/-ada pel volum de feina, les dates de lliurament i la competitivitat del doctorat. *

1 2 3 4 5

Gens d'acord Completament d'acord

17) Sovint m'haig de forçar a treballar en la tesi. *

1 2 3 4 5

Gens d'acord Completament d'acord

L'estrès és una situació en la qual la persona se sent inquieta, tensa, nerviosa; està angoixada, no es pot relaxar o no pot dormir perquè està contínuament preocupada.

18) Sents aquesta mena d'estrès darrerament? *

1 2 3 4 5

No, en absolut Molt

Aquesta part inclou algunes preguntes sobre les circumstàncies i el context dels teus estudis:

19) Sóc tractat/-ada de manera respectuosa. *

1 2 3 4 5

Gens d'acord Completament d'acord

20) Em preocupa no estar qualificat/-da pel títol de doctor/a *

1 2 3 4 5

Gens d'acord Completament d'acord

21) Els estudis de doctorat creen aïllament i anonimat entre els/les doctorands/es. *

1 2 3 4 5

Gens d'acord Completament d'acord

22) El doctorat estimula el meu desenvolupament personal. *

1 2 3 4 5

Gens d'acord Completament d'acord

23) El rol que he d'adoptar en els estudis de doctorat entra en conflicte amb els meus valors personals. *

1 2 3 4 5

Gens d'acord Completament d'acord

24) El professorat i/o professionals que em porten la tesi són atents i m'ofereix ajuda si en necessito. *

1 2 3 4 5

Gens d'acord Completament d'acord

25) Les relacions entre els/les doctorands/es són molt competitives. *

1 2 3 4 5

Gens d'acord Completament d'acord

26) L'elecció de la meva carrera professional em satisfà. *

1 2 3 4 5

Gens d'acord Completament d'acord

27) Els estudis de doctorat afavoreixen una actitud freda i impersonal. *

1 2 3 4 5

Gens d'acord Completament d'acord

28) Estic preocupat/-ada per la meva carrera professional. *

1 2 3 4 5

Gens d'acord Completament d'acord

29) Em sento orgullós/osa de la meva professió. *

1 2 3 4 5

Gens d'acord Completament d'acord

30) Em sento discriminat/-ada per raons de gènere. *

1 2 3 4 5

Gens d'acord Completament d'acord

31) Estic preocupat/-da pel nivell d'estrès a la meva feina un cop acabat el doctorat. *

1 2 3 4 5

Gens d'acord Completament d'acord

32) Em sento discriminat/-ada a causa del meu país d'origen. *

1 2 3 4 5

Gens d'acord Completament d'acord

33) Crec que els estudis de doctorat ofereixen una preparació adequada per a la meva professió. *

1 2 3 4 5

Gens d'acord Completament d'acord

34) El ritme del doctorat és massa accelerat. *

1 2 3 4 5

Gens d'acord Completament d'acord

35) Sovint rebo feedback constructiu sobre els meus coneixements i habilitats. *

1 2 3 4 5

Gens d'acord Completament d'acord

36) En quina fase del teu doctorat estàs ara? *

Formació prèvia (cursant assignatures)/ Delimitació de l'objecte d'estudi/ Preparació del treball de camp/ Recollida de dades/ Anàlisi de dades/ Redacció dels resultats/ Elaboració de les conclusions/Preparació de la defensa... Si es tracta d'un estudi teòric intenta explicar també el punt en el que et trobes. En tot cas, adapta la teva resposta a les circumstàncies de la teva tesi.

Aquesta part inclou afirmacions sobre l'escriptura en el doctorat i productes derivats (articles, comunicacions, pòsters, etc.):

37) És útil rebre comentaris d'altres persones sobre el text que escric. *

1 2 3 4 5

Gens d'acord Completament d'acord

38) Quan escric em preocupo per si el lector entendrà el meu text. *

1 2 3 4 5

Gens d'acord Completament d'acord

39) Sovint posposo la tasca d'escriure. *

1 2 3 4 5

Gens d'acord Completament d'acord

40) L'escriptura és una activitat creativa. *

1 2 3 4 5

Gens d'acord Completament d'acord

41) Trobo difícil escriure perquè sóc massa crític/a. *

1 2 3 4 5

Gens d'acord Completament d'acord

42) Les meves experiències prèvies d'escriptura són majoritàriament negatives. *

1 2 3 4 5

Gens d'acord Completament d'acord

43) Escric de manera regular independentment de l'estat d'ànim que tingui. *

1 2 3 4 5

Gens d'acord Completament d'acord

44) Produeixo un gran nombre de textos acabats. *

1 2 3 4 5

Gens d'acord Completament d'acord

45) Sense dates límit no escriuria res. *

1 2 3 4 5

Gens d'acord Completament d'acord

46) A vegades em sento completament encallat/-ada si haig de produir textos. *

1 2 3 4 5

Gens d'acord Completament d'acord

47) Em resulta difícil començar a escriure. *

1 2 3 4 5
Gens d'acord Completament d'acord

48) És important tenir l'ajuda d'un grup o d'un/a col·lega quan s'escriu. *

1 2 3 4 5
Gens d'acord Completament d'acord

49) Em resulta més fàcil expressar-me d'una altra manera que no sigui mitjançant l'escriptura. *

1 2 3 4 5
Gens d'acord Completament d'acord

50) Només escric quan la situació és prou tranquil·la. *

1 2 3 4 5
Gens d'acord Completament d'acord

51) L'habilitat d'escriure és quelcom amb el que naixem; no tothom ho pot aprendre *

1 2 3 4 5
Gens d'acord Completament d'acord

52) Em resulta difícil lliurar els meus textos perquè mai semblen acabats. *

1 2 3 4 5
Gens d'acord Completament d'acord

53) Em poso a escriure només si és absolutament necessari. *

1 2 3 4 5
Gens d'acord Completament d'acord

54) Odio escriure. *

1 2 3 4 5
Gens d'acord Completament d'acord

55) Sóc un/a escriptor/a regular i productiu/iva. *

1 2 3 4 5
Gens d'acord Completament d'acord

56) Podria revisar els meus textos indefinidament. *

1 2 3 4 5

Gens d'acord Completament d'acord

57) Escric sempre que tinc ocasió. *

1 2 3 4 5

Gens d'acord Completament d'acord

58) L'escriptura és una habilitat que no pot ser ensenyada. *

1 2 3 4 5

Gens d'acord Completament d'acord

59) Escriure és difícil perquè les idees que tinc són molt simples. *

1 2 3 4 5

Gens d'acord Completament d'acord

60) Reescriure els textos diverses vegades és bastant normal. *

1 2 3 4 5

Gens d'acord Completament d'acord

61) Escriure sovint implica generar noves idees i formes d'expressar-se. *

1 2 3 4 5

Gens d'acord Completament d'acord

62) L'escriptura desenvolupa el pensament. *

1 2 3 4 5

Gens d'acord Completament d'acord

Si us plau, escriu les dades següents relatives a les teves dades personals

País: *

En cas que no hagi nascut aquí, si gran part dels teus estudis pre-universitaris els has cursat aquí indica el nostre país

63) Edat: *

64) Gènere: *

- Home
- Dona

65) Tens fills? *

66) Llengua materna: *

67) Llengua de la tesi: *

68) Títol de llicenciatura: *

69) Títol de màster o denominació d'estudis de doctorat: *

70) Quan vas començar els estudis de doctorat? (incloent la part formativa) *

71) Quan calcules que llegiràs la tesi? *

Escull l'opció que més s'apropi

72) Format de la tesi doctoral: *

- Monografia
- Articles
- Encara no ho he decidit

73) Actualment segueixo el doctorat com a: *

- Doctorand/a a temps complet
- Doctorand/a a temps parcial
- Encara no ho he decidit (estic a l'inici)

74) Com estàs fent la tesi? *

- De manera individual
- De manera individual però en un equip
- Treballant en equip

75) Font d'ingressos durant el curs: *

Es pot respondre més d'una opció si és necessari

- No en tinc
- Treball com a ajudant/a a la universitat
- Becari/-ària de recerca
- Altres beques
- Feina
- Altre:

76) Tinc ingressos per fer la tesi fins a... *

(temps aproximat: 5 mesos, 2 anys...)

77) Alguna situació vital ha endarrerit els teus estudis de doctorat? *

- Sí
- No

78) Si és que sí, quina? *

Si has marcat NO escriu un guionet (-)

Nom de la universitat (no la facultat) on fas el programa doctoral *

En el cas d'estar adherit a un parc científic i tecnològic, un centre del CSIC o un altre centre d'investigació, especifica-ho

GRÀCIES PER LA TEVA PARTICIPACIÓ!



Universitat Ramon Llull

Aquesta Tesi Doctoral ha estat defensada el dia ____ d _____ de 20__
al Centre _____

de la Universitat Ramon Llull

davant el Tribunal format pels Doctors sotasignants, havent obtingut la qualificació:

President/a

Vocal

Secretari/ària

Doctorand/a

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