

The Journal of Teaching and Learning for Graduate Employability



ISSN: 1838-3815 (online) Journal Homepage: https://ojs.deakin.edu.au/index.php/jtlge/

Perceptions of student teamwork in professional programmes in higher education: a comparative study of Spain and South Africa

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Abstract

Teamwork is a fundamental employability skill and, as such, is fostered in professional programmes. This study presents a comparative analysis of higher education students' perceptions, development, and experiences of teamwork at two universities: one in South Africa and the other in Spain. These study sites provided a fruitful opportunity for comparison, given their contextual similarities. Through a survey of 395 3rd and 4th-year students of professional degrees, the authors explored how these students developed the teamwork skills required within their curricula. The findings showed that respondents from both institutions perceive teamwork similarly, but there are significant differences in how these skills are developed. While most South African respondents had participated in courses focused on team functioning, the Spanish had learnt to function in teams during project work. Furthermore, the South African sample was more aware of the impact of socio-cultural factors on team functioning than the Spanish one. The former reported feeling marginalised due to their race, gender and language to a greater extent than the Spanish. The paper outlines the potential benefits of successful teamwork, such as improving social cohesion. The results could be useful to policymakers and lecturers designing context-specific interventions to develop students' teamwork skills.

Keywords employability, teamwork, workplace readiness, higher education, South Africa, Spain

Introduction

Graduates from professional programmes entering the workplace need to be equipped with disciplinary knowledge. Architects must design buildings, engineers must solve technical problems, and accountants must manage financial records. However, besides carrying out these specialist actions, graduates must exhibit transferable skills that will determine how they perform their work. These skills, including leadership, communication, problem solving and teamwork, are variably known as soft skills, generic, key or transversal competencies and employability skills (Tight, 2021). They are considered fundamental to the dual considerations of finding employment and performing it adequately.

This paper focuses on teamwork. The International Labour Organisation (ILO) classifies teamwork as one of four broad skill categories required by employers that need to be integrated into education programmes (International Labour Office, 2013). More specifically, in South Africa and Spain, where

Nudelman, G. (2022). Perceptions of student teamwork in professional programmes in higher education: a comparative study of Spain and South Africa. Journal of Teaching and Learning for Graduate Employability, 13(1), 94-108 94

this research emanates, teamwork is a core requirement for higher education programmes. The South African Qualifications Authority (SAQA) has formulated seven critical cross-field competencies that underpin all national qualifications in the country. The second of these states that graduates must be able to 'work effectively with others as a member of a team, group, organisation, community' (SAQA, 2000). Spain is a member of the European Higher Education Area (EHEA), a body formed to increase staff and students' mobility across European borders and facilitate employability (EHEA, n.d.-b). The EHEA (emphasising preparation of students for the workplace) requires the integration in all programmes of generic 'soft skills' (EHEA n.d.-a), including the ability to work in teams. Spanish education authorities and the National Agency for Quality Assessment and Accreditation (ANECA) have procedures for designing, approving, monitoring, and assessing their qualifications (Bezanilla et al., 2019). In fact, Spanish Higher Education regulations have established learning objectives expressed in terms of competencies (Ministerio de Educación y Ciencia 2007).

These policies mean that students in South African and Spanish tertiary institutions should be exposed to teamwork activities. Yet, as shown below, there are many complexities around students' teamwork experiences that impact the efficacy of teaching and learning activities to develop teamwork competency. Ramsden (2003) asserts that for educators to improve their teaching, they need to listen to and learn from their students. In the context of teamwork pedagogy, interventions should be grounded in the students' understanding of teamwork, including the factors that constrain and enable its development in a university context. Since pedagogy's success largely relies on student engagement and feedback, their voice should be considered when assessing approaches for promoting teamwork within a curriculum (Wilson et al., 2018). This paper outlines the findings of research carried out at universities in South Africa and Spain. Students enrolled in professional programmes were asked to reflect on their teamwork experiences during their studies. The purpose of the study is threefold:

- explore students' perceptions of teamwork
- understand how students develop teamwork skills in higher education
- gather data about students' experiences of teamwork in the context of diversity and inclusion

Developing teamwork in higher education

Teamwork skills can be generally understood as behaviours and attitudes that enable effective team functioning (Mathieu et al. 2008). The looseness around the definition of "team", however, can lead to a lack of clarity regarding the determinants of effective teamwork. Katzenbach and Smith's (1993, p. 113) classic definition of a team is "a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable". Here, teamwork is understood as the actions, time and effort contributing to developing mutual purpose, work products, decision making and accountability. Popular teamwork theories have been posited over the years, including team effectiveness models by Tuckman (1965), Katzenbach and Smith (1993) and Hackman (2002).

In recent years, shifts in the contemporary workplace have expanded a more fluid conceptualisation of teams given geographic dispersion, remote work and collaborative technologies (Benishek & Lazzara, 2019). Teamwork thus remains a dynamic and multidimensional construct, and empirical and theoretical research into its determinants is ongoing (Benisheck & Lazzara, 2019; Roberts et al., 2022).

With a specific focus on higher education, the literature regarding students' development of teamwork skills falls into two categories. In the first category, encouraging teamwork skills in students is seen as an end in itself. These studies highlight that contemporary graduates entering the workplace will need to work in teams and that these will often be multicultural, multidisciplinary and international (Riebe et al., 2016; Marasi, 2019; Bravo et al., 2019). Therefore, students must become

familiar with how to work positively and productively within teams so that they can transfer these skills to the workplace. In the second category, working in teams at university is seen as a means through which graduates can learn a host of other vital competencies. These include intercultural competence (de Hei et al., 2020; Alcalá del Olmo Fernández et al., 2020), critical thinking (Plotnikova & Strukov, 2019), creativity (Lee, 2018) and communication (Koris & Vuylsteke, 2020).

Teamwork literature in higher education also focuses on teaching initiatives developed to this end. Marasi (2019) utilised creative games, including small-group role-play and improvisation, to develop undergraduate students' teamwork skills. Casper (2017) used LEGO blocks to encourage communication and collaboration with groups of 5-7 students who worked together to create different structures. Yet, there is also evidence that some educators place more emphasis on the final product (i.e. on the quality of completion of the task undertaken by the team) than on building the skills and attributes that students need to work productively together (Riebe et al., 2016). Students may be placed in groups and set to work on a collaborative task without any input into team development. While this approach to teamwork development has been used within higher education for decades, it has been shown that teamwork does not automatically occur as a consequence of putting people together and instead requires guidance and mentorship (Ghannam & Ahmad, 2020; Marasi, 2019).

One tension highlighted within the scholarship of student teamwork relates to the challenge of working in socially diverse teams. Students engaging in multicultural teamwork report various challenges, including differences in work orientation, language and communication issues, and fears of causing offence, which can lead to avoidance and disengagement (Reid & Garson, 2017; Riebe et al., 2016). Research by Shaw (2004) shows that teams that are diverse in terms of gender, age and nationality may even place some students at a disadvantage when it comes to performance and grade outcomes. However, the impact of social diversity on team functioning in higher education has not to date been studied in great detail (Riebe et al. 2016). This paper begins to address this gap with a particular focus on students' experiences in South Africa and Spain.

Study context

South Africa and Spain

The data was gathered at the University of Cape Town (UCT) and the Polytechnic University of Valencia (UPV). While the host countries are continents apart and differ historically, geographically, economically and demographically, there are commonalities. Both countries are relatively young democracies, with South Africa's first democratic elections in 1994 and Spain's democratic Constitution adopted in 1978. Since then, both countries have had to balance the development of just, equitable societies with the pressures of global capitalism (Ornellas et al., 2017). To remain viable in international markets, both South Africa and Spain have implemented policies based on neoliberalist ideals, such as increasing privatisation and the prioritisation of market-driven over social commitments. This has resulted in the 'deterioration of social cohesion, lack of social protection, decreased welfare support, increasing inequality, failure to address previous grievances and rising risk' for vulnerable citizens (Ornellas et al., 2017, p. 538). As a result, both are characterised by high unemployment levels: South Africa - a 29.2% unemployment rate in 2020; Spain - a 15.5% unemployment rate (International Monetary Fund, 2021), almost double the Euro Area average.

In terms of education, both countries have low enrolment rates, high attrition rates and high grade repetition (Do Vale, 2016). South Africa appears last in the ranking of maths and science education in 135 countries (Baller et al., 2016). While not fairing as dismally, students in Spain score below the Organisation for Economic Cooperation and Development (OECD) average in mathematics and science (OECD, 2019). Both countries face the challenge of youth unemployment and high NEET rates [not in education, employment or training] (Holte et al., 2019; López Rupérez & García, 2020).

Another similarity is that their population is heterogeneous in ethnicity, culture, language, race and nationality. In South Africa, the population of 59,62 million is made up of black Africans [81%], coloured/mixed-raced individuals [9%], whites [8%] and Indian/Asians [3%] (Maluleke, 2020). There are 11 official languages, various ethnic and religious groups, and an estimated 4.2 million international migrants. Most are from Mozambique, Zimbabwe, Lesotho and Malawi (Moyo, 2020).

The Spanish population is approximately 47 million (World Bank, 2020). There are four official languages and 17 historical autonomous regions, each of which boasts its own culture, customs, dialects and even physical phenotype (Ardila, 2020; Žiūraitė, 2019). The country became the world's third-largest recipient of immigrants during the 2000s, representing 13.1% of the total population in 2019 (Carvalho, 2020; Atienza & Romo, 2021). There are 6.1 million international migrants in Spain, most of whom originate from Morocco, Colombia and Venezuela (Instituto Nacional de Estadística, 2021). Spanish is the mother tongue for 89% of the population, Catalonian for 9%, Galician for 5% and Basque for 1%. Since the Spanish government prohibits the official collection of racial data, statistics relating to the racial demographics are not available (Flores, 2015).

Institutional contexts

Located in Cape Town, UCT is ranked the top African university according to the Quacaquarelli Symonds (QS) World University Rankings (Craig, 2021). UPV is ranked the best university in Valencia and the ninth in Spain (Craig, 2021). The student population size is similar at both universities. In 2019, UCT student enrolment stood at 29,272 students (UCT, 2020) and student enrolment at UPV was 28,069 (UPV, 2019).

The development of teamwork skills, with other professional competencies, is a focus for both institutions. UCT's teaching and learning strategy (UCT, 2013, p. 179) highlights the need to 'provide students with opportunities to attain a range of transferable and specialist attributes during their studies', with teamwork a prime example of such a transferable attribute. To this end, teaching staff must find ways to embed these attributes into their curricula. Also, some professional programmes at UCT need to incorporate specific graduate attributes for accreditation by external professional bodies. For example, engineering degrees are accredited by the Engineering Council of South Africa (ECSA). One of ECSA's attributes relates specifically to 'Individual, team and multidisciplinary working' (ECSA, 2019) and requires that graduates demonstrate competence to work in teams. Where professional accreditation is at stake, incorporating generic competencies into the curriculum, in this case, teamwork, becomes imperative.

Generic competencies are similarly emphasised at UPV. The UPV Transversal Competence Institutional Project was established in the 2015/16 academic year (UPV, 2020). This project required the incorporation of 13 transversal skills into curricula. Skill number six relates to 'teamwork and leadership' and requires that students work and effectively lead teams to achieve the common goals of a group of people. At UPV, it is mandatory to include these competencies within all courses and ensure that these are appropriately evaluated.

This brief context-setting lays out some similarities in the study contexts. Students in both countries are undoubtedly affected by the demographic complexities outlined above, impacting their interactions in higher education spaces. UCT and UPV, both highly ranked universities of similar size, locate the development of transferable skills (including teamwork) within their teaching and learning priorities. In developing teamwork competencies, students must find ways to work across and with the described social differences. These two contexts thus provide fruitful sites for exploring how students experience teamwork within professional programmes.

Research question

How do students in Spain and South Africa perceive and develop teamwork skills and experience teamwork in their professional degree programmes?

Method

Data for this study was gathered through a teamwork survey conducted from March 2019 to October 2020 in English at UCT and Spanish at UPV. The authors developed the questions to collect data from students on aspects of teamwork experience, on and off-campus. The survey was divided into sections that moved from closed to open-ended questions, combining scaled and matrix questions (Easterby-Smith et al., 2012; Fellows & Liu, 2015; Babbie, 2020). The rating questions were based on 5-point Likert scales (Nunnally & Bernstein, 1994). The first section focused on respondents' location, field of study, gender and ethnicity. The next section sought information about students' aspirations and experience of their field through study and vacation work. The focus then shifted to theoretical and experiential responses to teamwork, and finally, open questions focused on experience of and feelings about inclusion and perceived reasons for lack thereof.

Qualtrics XM Online Survey Software was used, which allowed the authors to use cloud-based survey technology to reach a larger number of respondents. The authors distributed the survey link via email and internal announcements. At UCT, the survey link was distributed to the Faculties of Engineering and the Built Environment and Commerce, which offer professional degrees. These degrees focus on a particular workplace activity in industry and commerce (viz. Electrical and Electronics Engineering, Mechanical and Mech-Elec Engineering, Property Studies, Information Systems, and Actuarial Science). Similarly, at UPV, the links were distributed to Escuela Técnica Superior Ingeniería de Edificación and Escuela Técnica Superior de Arquitectura, for students enrolled in Building Engineering and Architectural Studies.

The responses from 395 participants were analysed, with a gender distribution of 57% male to 43% female respondents and institutional distribution of 46% UCT to 54% UPV. There was an approximately equal number of 3rd and 4th-year students. However, there was an imbalance in gender at UCT, given the predominance of males taking industry-related degrees in South Africa (see Table 1). The UPV sample reflected increased gender balance in Spanish architectural schools over the last 12 years (Sánchez de Madariaga, 2018).

Regarding race, 81% of the UPV sample identified themselves as white/caucasian, 9% as Latino, 3% unspecified, and the remaining 7% were Arab, mixed, black/African, and Asian. The UCT sample includes 37% Black/African, 36% white/caucasian, 11% Indian, 8% Coloured and the rest Asian, mixed-race and unspecified.

University	Total	3 rd years	4 th years	% Female	% Male
UCT	183	108	75	33%	67%
UPV	212	101	111	51%	49%

Table 1: Total Sample Spread

Answers to the open-ended survey questions were categorised into themes, and results were analysed by country, ethnicity and gender.

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Findings

Perceptions of teamwork

Participants were asked to choose five elements from a list of 20 that best represented their definitions of teamwork. Figure 1 below shows the comparative findings from UCT and UPV.



Figure 1. Definitions of Teamwork at UCT and UPV

Respondents at both institutions ranked 'listening to others', 'sharing ideas' and 'coordinating people and tasks' in the top three most important aspects of teamwork. One slight difference was that a higher percentage of respondents at UCT ranked 'handling conflicts' as a vital aspect of teamwork (9.8%), while UPV respondents placed less emphasis on this (5.5%) and more on solving problems (13.9%). Fewer UPV respondents highlighted 'acknowledging diverse backgrounds in teams' (3%) and 'acknowledging gender in team members' (0.2%) as essential elements of teamwork than UCT respondents. For both universities, 'acting independently', 'being knowledgeable', 'persuading others', and 'negotiating to win' were among the five least important elements. Respondents at UPV, however, ranked 'upskilling self in relevant areas' higher than the respondents at UCT.

As students studying towards professional qualifications, respondents at both universities articulated a clear link between teamwork and professional practice, highlighting: 1) teamwork is an important quality for a professional in any field; and 2) successful teamwork depends on a professional approach. Concerning the former, one respondent from UPV explained,

A professional must know how to work in a group, cooperating in the development of the work issue, respecting others' positions and validating their contributions to reach a final result where all the parties have contributed and gotten new points of view in respect to their own (Ana, 3rd year, Architectural Studies, UPV).

A UCT respondent made this link even more explicit, stating that 'to work in a professional sense, an individual must be able to work well and get along with a team. If nobody wants to work with you, then your professional career will suffer' (Nkosi, 3rd year, Mechanical Engineering, UCT). Here, teamwork skills are seen as a professional imperative. About the latter, a UCT respondent said, 'The way one conducts oneself while working in a team should be in a professional manner. Language,

etiquette, communication and respect should all be conducted in a professional manner when doing teamwork' (Xhanti, 3rd year, Mechanical Engineering, UCT). This intersection of teamwork and professionalism (whereby teamwork is an essential part of professionalism and professionalism is an essential part of teamwork) was prevalent at both universities.

When describing the link between teamwork and professionalism, students at both institutions did not refer specifically to teams comprising different races, cultures, languages and genders. Instead, the social composition of the group was largely ignored, except by two participants. One UCT respondent highlighted that teamwork entails 'knowing how to act in a group setting, how to contribute and how to act amongst a diverse team' (Ropa, 4th year, Information Systems, UCT). A UPV student mentioned that teamwork implies 'knowing how to respect others and take advantage of the diversity of ideas and methodologies' (Sandra, 4th Year, Building Engineering, UPV). Aside from these two comments, the findings show that respondents at both institutions take a more generic view of successful teamwork, highlighting one-size-fits-all principles for effective teamwork such as 'knowing your abilities and your limits, being able to recognise them before the rest and asking for help to improve' (Carmen, 3rd year, Architectural Studies, UPV), and 'communicating your ideas clearly to the rest of your team members. Asking for help if your other members can assist you' (Riaz, 3rd year, Mechanical Engineering, UCT). These principles would apply to any team, regardless of whether they are homogeneous or heterogeneous. No explicit mention was made by students at either university of the added complexities of teamwork with socially diverse members. This is despite respondents at both institutions feeling strongly that social inclusion is an important principle to uphold when working in teams. Among the UCT respondents, 75% considered social inclusion 'very important', and 20% considered it 'important.' At UPV, 62% considered it 'very important', and 31% judged it as 'important'.

Finally, the values that enable successful teamwork within a professional setting were emphasised. UCT respondents explained that teamwork entails: 'being respectful in all interactions' (Matthew, 4th year, Information Systems, UCT); 'trusting each other in a team' (Tiyara, 4th year, Information Systems, UCT); and 'acting with honesty and integrity' (Nokwazi, 4th year, Actuarial Science, UCT). Similarly, UPV respondents saw teamwork as: 'the ability to be self-critical and willing to have an open mind' (Luis, 3rd year, Architectural Studies, UPV); 'sharing ideas to solve a problem posed at work' (Ana, 3rd Year, Architectural Studies, UPV); and 'compromise and dedication' (Víctor, 3rd Year, Architectural Studies, UPV); and remphasis on the values that underlie effective teamwork than the practices that enable it.

Development of teamwork competencies

Amongst the UCT respondents, 73% reported having received training in teamwork within their degree programme. Their experiences enabling the development of teamwork skills fell into three categories. First, 49% of respondents described courses that explicitly focused on developing teamwork. For example, the actuarial science students had taken a course called 'People Management', where they were 'taught how to manage different conflict styles, motivate different people to get work done and when team performance is most optimal' optimal' (Anoush, 4th year, Actuarial Science, UCT). The engineering students specified another course called 'Professional Communication Skills', which emphasised enabling teamwork in preparation for the workplace. Second, 48% of UCT respondents felt they had developed teamwork skills through participating in group projects. In these cases, principles of successful teamwork were not explicitly taught but developed as the respondents navigated the process of working together. The respondents' language when reporting on these experiences indicates some underlying tensions regarding working in teams. For example, one UCT respondent said 'we've been forced to work in teams on various projects' (Tumelo, 3rd year, Mechanical Engineering, UCT), and another explained, 'this was not necessarily training per se, but rather interaction and having to learn by working in groups' (Katlego, 4th year, Actuarial Science, UCT). The final category of university experiences that UCT respondents described as contributing to developing their teamwork skills was non-academic. These

included being a student leader at an Orientation week for incoming students and training to be a receptionist at a residence hall.

While the number of UCT respondents who reported receiving teamwork training during their degrees was high, only 27% of UPV respondents expressed the same. Only 4% of UPV respondents reported having participated in formal courses similar to those at UCT, and 6% developed their teamwork skills as part of non-academic university experiences. The remaining respondents (90%) all declared their exposure to teamwork within their academic studies as limited to projects within their courses. For example, one respondent explained '[w]e have carried out many teamwork projects, but no team management guidelines have been given' (Oscar, 4th year, Building Engineering, UPV). Another stated 'There are many teamwork projects, but at the beginning nobody tells you how to work in the best way, you learn as you go' (Elsa, 4th year, Architectural Studies, UPV).

The majority (76% at UCT and 63% at UPV) had participated in some form of work experience during their studies. Many ascribed their development of teamwork skills to this. UCT respondents alluded particularly to vacation work related to their studies. For example, one student explained

I once went to a community build project. We had to work in groups. Within those groups you get different genders, different races and different backgrounds. We had to help each other and organise how we are to share the work. In order to work in harmony we had to have teamwork skills. (Sabeehah, 3rd year, Architectural Studies, UCT).

Another stated 'we had a project where all vacation work students had to create concepts in a group for projects to improve Cape Town and then present it' (Daniel, 3rd year, Mechanical Engineering, UCT). While some UCT respondents reported having had formal teamwork training as part of their vacation work, most explained that teamwork skills were developed as a by-product of working with others. For example, one respondent described how a colleague had wanted to do all the project work himself, and the other group members had had to convince him to let them all participate. They had resolved the situation by letting him take on the parts he was good at and doing the rest themselves. This on-the-job negotiation, compromise, and problem-solving indicate how most respondents developed teamwork skills during their vacation work. As one student said, 'we're mainly just thrown into the mix of a team and expected to work with others to solve a common goal' (Sandile, 3rd year, Mechanical Engineering, UCT).

The UPV respondents' experiences were somewhat different. Those who reported having undertaken work experience mainly referred to roles within the hospitality and entertainment industry, not those aligned with their professional fields of study. Nevertheless, they shared their experiences developing teamwork skills as waiters, cafeteria workers, summer school instructors and camp counsellors. While the respondents highlighted no formal training for teamwork skills, they did articulate the importance of teamwork for success within these roles. For example, one participant said, 'I work in the hospitality industry, and if you don't work as a team, the service simply doesn't work out in the best way' (Nuria, 4th year, Architectural Studies, UPV). Another explained, 'the work involved in a cafeteria happens through task distribution and good communication between team members' (Teresa, 4th year, Architectural Studies, UPV).

Experiences of teamwork

The study findings showed that despite extensive teamwork practice at university and in the workplace, many respondents still felt socially excluded when working on team projects (see Tables 2 and 3).

Have you ever felt marginalised when working in teams?	Number (%)	% Male	% Female
Yes	78 (47%)	45	55
No	87 (53%)	80	20
Total	165 (100%)		

Table 2. Marginalisation During Teamwork Among UCT Respondents

Table 3. Marginalisation During Teamwork Among UPV Respondents

Have you ever felt marginalised when working in teams?	Number (%)	% Male	% Female
Yes	87 (42%)	38	62
No	121 (58%)	57	43
Total	208 (100%)		

The proportion of UCT respondents who reported feeling marginalised during teamwork (47%) was slightly higher than that of UPV respondents (42%). The largest proportion of UCT students who felt that they had been marginalised (33%) believed this was due to their race. One respondent described how he 'once worked with a group of white students who were friends, and I was the only outsider. So what I thought did not matter. I always got side-lined.' (Goodness, 3rd year, Architectural Studies, UCT). Another explained, 'White people typically assume that my contributions will not be of the 'appropriate standard.' I typically have to prove myself' (Khodani, 3rd year, Mechanical Engineering, UCT). These quotes articulate black respondents' experiences of not being integrated within a team because of their race. In addition, several participants also highlighted their belief that their language was the reason for their marginalisation. In particular, students who identified as not speaking English fluently expressed that they were made to feel less valued within the group.

A significant proportion (22%) of UCT respondents reported that gender was the reason for their marginalisation. In fact, 72% of females reported having had this experience. Some referred to the gendered nature of their discipline to explain why they had been marginalised when working in teams. For example, a mechanical engineering student explained, 'I am a female in engineering. Being a female in male-dominated fields results in my abilities being overlooked often' (Claire, 3rd year, Mechanical Engineering, UCT). Similarly, an actuarial science student said, 'As a woman in a male-dominated field, I often think that the guys in my class do not take my opinion seriously or value my input' (Sukoluhle, 4th year, Actuarial Science, UCT). However, there were also many responses that referred more generally to the biases that female respondents had experienced when working in teams. Female students described not being taken seriously, struggling to be heard and being disrespected when working in teams of men. One respondent described how she had been forced to adopt a more combative approach when working in teams, explaining that 'working in male-dominated teams... sometimes means butting head with people just so your point of view is considered' (Chantelle, 3rd year, Mechanical Engineering, UCT).

The remaining UCT participants believed their marginalisation was due to their own lack of skills, experience or education. They alluded to being excluded because they either had less to contribute or could not adequately articulate their contributions. For example, one student described having

'less to offer to the group due to a lack of understanding or being slow to understand what was required/being done' (Phole, 3rd year, Architectural Studies, UCT).

As shown in Table 3, at 42%, the proportion of UPV respondents marginalised during teamwork was similar to the 47% proportion of UCT respondents. However, the reasons the UPV respondents gave differed greatly from those of the UCT respondents. While 51% of female respondents reported marginalisation during teamwork, only 3 UPV respondents specifically mentioned gender as the cause. Only Carlos, a male student in the 4th year of Building Engineering, cited race as a factor, saying only 'there's lots of racism' when describing his teamwork experience. Similarly, only one participant specifically highlighted language as a factor in their marginalisation, stating, 'the people in my group normally did not speak my language, and I felt marginalised' (Amine, 3rd year, Architectural Studies, UPV).

One factor that the UPV sample highlighted was age. Several architecture students described how, when working on a team project that brought together students from different years of study, the students in the lower years were not integrated into the team. Laura, enrolled in the 3rd year of Architectural Studies explained that 'people in higher courses don't take your ideas into account.' And Belén, from the same course, said, 'I was in the second year, they didn't take me into account at all... the people were older than me.'

Aside from these comments regarding gender, race, language and age, reasons given by the other UPV respondents for their marginalisation related to a lack of generic teamwork skills. For example, one respondent highlighted how they had worked in a team where the members were not committed to the teamwork process. They described how their teammates were '...not sharing ideas. They were working in a group, but each one does his part and then put them together, with little teamwork' (Elena, 4th year, Building Engineering, UPV). Another said they had worked in a team where 'every person decided if they want to participate or not' (lván, 3rd year, Building Engineering, UPV), highlighting the lack of buy-in to the teamwork process. A few students described the experience of working in teams where the other members were all friends, resulting in their exclusion from the team experience. Martina, a 4th year Building Engineering student, described this in the following way: 'working with people who are friends with each other, are closed-minded and only support their friend's ideas.' Also, some respondents felt they could not contribute because they were shut out by the louder, more controlling team members. These students did not provide a social reason such as race or gender for this dynamic. Instead, they referred to the dynamic itself as the reason for their experience of marginalisation.

Discussion

The previous section outlined the findings related to UCT and UPV students' perceptions, development, and experiences of teamwork in their professional degree programmes. Students at both universities must navigate social complexities such as unemployment, increasing inequality and lack of cohesion in South Africa and Spain. Also, they will have been exposed to the demographic diversity extant in both countries. With their specific focus on teamwork, it is clear that both universities have committed to developing transferable skills within their curricula. On the one hand, this is externally motivated since, as explained in the paper's introduction, both SAQA and ENEA mandate that generic competencies must underpin higher education qualifications. On the other hand, both universities have enacted internal strategies to ensure that students develop these competencies during their degrees.

Both institutions locate teamwork as a skill that, while developed at university, can be applied in different contexts. This is evident through the word 'transferable' in UCT's teaching and learning strategy (UCT, 2013) and 'transversal' in UPV's project title, both of which allude to the goal of equipping students with skills that they can use beyond university. However, this notion of skills as transferable is not uncontested. Some of the critiques of transferable skills are that: they are so generic as to no longer be useful within specific professional disciplines (Bennett et al., 2000); skills

cannot be neatly transferred between very different contexts, such as higher education and the workplace (Fenwick, 2013); and they fail to explain labour outcomes (Holmes, 2013), since even graduates who display teamwork, communication and leadership skills may fail to secure employment.

None of these alternative perspectives on transferable skills was articulated by UCT or UPV respondents. The findings show that respondents have bought into the notion that teamwork can be developed in university courses and *will* be transferable to their professions once they graduate. This is evident in how respondents from both universities recognised and strongly articulated the link between teamwork and the professional workplace. In addition, the definitions of teamwork provided by the students emphasised non-context specific factors like 'sharing ideas', 'listening to others', and' time management.' They highlighted universal values like 'respect', 'trust', and 'compromise' as integral to effective teamwork. Their emphasis on behaviours, attitudes and values that enable effective team functioning shows that students' understanding of teamwork aligns with definitions from the literature (Katzenbach & Smith, 1993). Finally, respondents from both universities developed similar teamwork skills during their vacation work experiences, even though they worked in different fields. These factors prove that UCT and UPV respondents accept the uncritical, uncomplicated notion of teamwork as a transferable skill that the universities propound.

The findings show that UCT respondents were more conscious of the impact of socio-cultural factors on team functioning than were UPV students. This is particularly evident in two areas of the findings. First, the UCT respondents highlighted 'acknowledging diverse backgrounds in teams' and 'acknowledging gender in team members' as essential elements of teamwork, neither of which was emphasised by the UPV respondents. Second, 47% of UCT respondents reported having felt marginalised during teamwork due to race, gender or language. This is very different from the UPV results. While 42% reported having felt marginalised during teamwork, the reasons for this marginalisation were related to factors of age and a lack of generic teamwork skills. Given the similarities between the South African and Spanish contexts regarding the population heterogeneity, this difference in UCT and UPV respondents' teamwork experiences is curious. Why did UCT respondents focus on race, gender and language when describing their experiences of marginalisation during teamwork while UPV respondents did not? There are two possible contributing factors to this, which are outlined below.

The first contributing factor could be the different approaches to teamwork skills development at the two institutions. The findings showed that 73% of UCT respondents reported having received teamwork training during their studies, compared to only 27% of UPV respondents. The more nuanced awareness of the impact of race, gender and language on team functioning, as highlighted by the UCT participants, could be due to sensitisation to these issues due to explicit teaching of teamwork skills (Riebe et al., 2016). This contrasts with the approach of teaching teamwork by simply placing students into groups and expecting them to work together (Marasi, 2019). It could be argued that participating in dedicated teamwork training, such as the People Management and Professional Communication Skills courses, allowed them to engage more critically with teamwork and to reflect on and articulate their personal experiences. This could explain why UPV respondents ranked 'upskilling self in relevant areas' higher than UCT respondents. Since the UPV students' teamwork is related mainly to carrying out group projects, they may rate bringing individual skills to the team highly to contribute to the successful completion of the project.

The second factor contributing to the difference between respondents' experiences of marginalisation when working as teams could be the national contexts. With the ongoing legacies of colonialism and apartheid, South Africa continues to experience racial, cultural and gender-based fractures. Related to the study context, between 2015-2017, the #FeesMustFall student protests (Langa et al., 2017; Gouws, 2017) brought students' experiences of racism, sexism and classism in the higher education sector to the fore of national awareness. The protests led several times to total shutdowns of the country's higher education sector and resulted in ongoing calls for the decolonisation of curricula. This is the social milieu in which the UCT respondents go about their

studies, which would account for their heightened awareness of racial, gender and language issues. This deep and abiding focus on race is not present in Spain. As highlighted earlier in the paper, the Spanish government prohibits the official collection of racial data, which means that the census does not ask questions about race or ethnicity. Race is clearly not on the national agenda, and, as such, it follows that most UPV respondents would not identify this as a factor in team cohesion. At UPV, students in the School of Architecture participate annually in group projects in which all second- to fifth-year students work together. This accounts for the UPV respondents' experiences of feeling marginalised when working in teams because of their ages and stage of study, given more advanced students may be less willing to collaborate with more junior students. This also reflects Shaw's (2004) findings regarding the disadvantages that some students face when working in diverse teams.

Whether the divergent experiences of the UCT and UPV respondents can be explained by the nature of the teamwork training provided or by the national contexts (or a combination of these factors), this study shows that student teams in both universities are functioning sub-optimally. Over 40% of respondents reported feeling marginalised while working as a team and shared their experiences of being side-lined, disrespected and excluded. In addition, while the respondents acknowledged that teamwork would be a vital part of their future professional roles, the use of words like 'forced' and 'having to' when describing their teamwork experiences indicates a level of resistance. Indeed, it is telling that while respondents shared the skills they had drawn on to make their teams functional, no respondents at either university shared any positive teamwork experiences. This is out of synch with other studies in which students highlighted benefits of teamwork, such as the development of new knowledge and skills (Lohmann et al., 2019), comradery and mutual support (Bashan & Holsblat, 2017), and the forging of new friendships (Casper, 2017). Teamwork has a potential role to play not just in preparing students for the workplace but in bridging the social divides in both countries. Thus, more emphasis should be placed on enabling successful teamwork at both universities.

Conclusion

This study presents a comparative analysis of students' perceptions, development and experiences of teamwork at UCT and UPV, universities in South Africa and Spain respectively. While these two study sites are geographically distant, they provide a fruitful opportunity for comparison and contrast, given the similarities in their contexts as relatively new democracies with diverse populations and myriad social challenges.

While both respondent sets perceived teamwork similarly, there are significant divergences in how teamwork skills are developed at the two universities. At UCT, most respondents had participated in courses that focused explicitly on team functioning. At UPV, most respondents had received no team teaching but had learnt to function in teams while working on group projects. Another difference in the findings related to students' experiences of teamwork. UCT respondents reported feeling marginalised due to their race, gender and language while working in teams, whilst UPV respondents mentioned age and generally poor team functioning.

The study shows that the potential benefits of successful teamwork, such as strengthened social connections and the development of new knowledge, extend beyond preparation for the professional workplace to the improvement of social cohesion. As such, the development of teamwork skills in students warrants further focus at both institutions. Policymakers and educators can utilise the results to ensure that interventions developed to this end are context-specific and directly address the teamwork challenges experienced by students at each institution.

There is much scope for future research stemming from this study. First, while the study sample included students from different professional disciplines, there would be value in focusing more directly on specific departments at UCT and UPV. This would allow for more composite explorations of teamwork development that include not only student responses but also curriculum documents, analysis of teamwork teaching interventions and input from teaching staff. Second, this study's goal

of comparing the universities in South Africa and Spain meant that the discussion of the findings from each university was necessarily curtailed. A deeper analysis of the students' experiences at either UCT or UPV could result in significant findings that could strengthen teamwork skills development at each institution. Finally, while this study explored students' experiences of teamwork quite generally, future research could use team theories to evaluate student performance on specific team projects to develop a richer understanding of critical success factors in both contexts.

References

- Alcalá del Olmo Fernández, M. J., Santos Villalba, M. J., & Leiva-Olivencia, J. J. (2020). Metodologías activas e innovadoras en la promoción de competencias interculturales e inclusivas en el escenario universitario. European Scientific Journal, 16(41), 6–23. https://doi.org/10.19044/esj.2020.v16n41p6
- Ardila, A. (2020). Who are the Spanish speakers? An examination of their linguistic, cultural, and societal commonalities and differences. *Hispanic Journal of Behavioral Sciences*, 42(1), 41–61. https://doi.org/10.1177/0739986319899735

Atienza, P. & Romo, C. E. (2021). El efecto de la población inmigrante sobre el empleo y salarios de los trabajadores nativos: Una investigación empírica para España, 2009-2018. Estudios de Economía Aplicada, 39(3), 1–18. https://doi.org/10.25115/eea.v39i2.3706

- Babbie, E. R. (2020). The practice of social research (15th ed.). Cengage Learning.
- Baller, S., Dutta, S., & Lanvin, B. (2016). Global information technology report 2016. World Economic Forum. https://www.weforum.org/reports/the-global-information-technology-report-2016
- Bashan, B., & Holsblat, R. (2017). Reflective journals as a research tool: The case of student teachers' development of teamwork. Cogent Education, 4(1) https://doi.org/10.1080/2331186x.2017.1374234
- Benishek, L. E., & Lazzara, E. H. (2019). Teams in a new era: Some considerations and implications. Frontiers in Psychology, 10, 1-15. https://doi.org/10.3389/fpsyg.2019.01006
- Bennett, N., Dunne, E., & Carré, C. (2000). Skills development in higher education and employment. Taylor & Francis.
- Bezanilla, M. J., Olalla, A. M. G., Castro, J. P., & Ruiz, M. P. (2019). A model for the evaluation of competencebased learning implementation in higher education institutions: Criteria and indicators. Tuning Journal for Higher Education, 6(2), 127–174. https://doi.org/10.18543/tjhe-6(2)-2019pp127-174
- Bravo, R., Catalán, S., & Pina, J. M. (2019). Analysing teamwork in higher education: An empirical study on the antecedents and consequences of team cohesiveness. Studies in Higher Education, 44(7), 1153–1165. https://doi.org/10.1080/03075079.2017.1420049
- Carvalho, J. M. D. D. (2020). Immigrants' acquisition of national citizenship in Portugal and Spain: the role of multiculturalism?. Citizenship Studies, 24(2), 228–246. https://doi.org/10.1080/13621025.2019.1707483
- Casper, W. C. (2017). Teaching beyond the topic: Teaching teamwork skills in higher education. Journal of Higher Education Theory and Practice, 17(6), 53–63. http://www.digitalcommons.www.nabusinesspress.com/JHETP/CasperWC 17 6 .pdf
- Do Vale, H. F. (2016). Explaining education reforms and decentralisation in Brazil, South Africa, South Korea, and Spain. Lex Localis, 14(3), 591–612. https://doi.org/10.4335/14.3.591-612(2016)

Easterby-Smith, M. E., Thorpe, R., & Jackson, P. R. (2012). Management research (3rd ed.). SAGE.

- Engineering Council of South Africa. (2019). Qualification Standard for Bachelor of Science in Engineering (BSc(Eng))/ Bachelors of Engineering (BEng): NQF Level 8. https://bit.ly/3sEHilx
- European Higher Education Area. (n.d.-a). Employability of graduates. http://www.ehea.info/pageemployability-of-graduates
- European Higher Education Area. (n.d.-b). European higher education area and Bologna Process. http://ehea.info/
- Fellows, R. F., & Liu, A. M. (2015). Research methods for construction. John Wiley & Sons.
- Fenwick, T. (2013). Understanding transitions in professional practice and learning: Towards new questions for research. Journal of Workplace Learning, 25(6), 352–367. https://doi.org/10.1108/jwl-06-2012-0047
- Flores, R. D. (2015). The resurgence of race in Spain: Perceptions of discrimination among immigrants. Social Forces, 94(1), 237-269. https://doi.org/10.1093/sf/sov056
- Ghannam, R., & Ahmad, W. (2020). Teaching teamwork to transnational students in engineering and technology. Compass, 13(2), 1-15. http://doi.org/10.21100/compass.v13i2.1040
- Gouws, A. (2017). Feminist intersectionality and the matrix of domination in South Africa. Agenda, 31(1), 19-27. https://doi.org/10.1080/10130950.2017.1338871

Hackman, J. R. (2002). Leading teams: Setting the stage for great performances. Harvard Business Press.

- de Hei, M., Tabacaru, C., Sjoer, E., Rippe, R., & Walenkamp, J. (2020). Developing intercultural competence through collaborative learning in international higher education. Journal of Studies in International Education, 24(2), 190-211. https://doi.org/1177/1028315319826226
- Holmes, L. (2013). Competing perspectives on graduate employability: Possession, position or process? Studies in Higher Education, 38(4), 538–554. https://doi.org/10.1080/03075079.2011.587140
- Holte, B. H., Swart, I., & Hiilamo, H. (2019). The NEET concept in comparative youth research: The Nordic countries and South Africa. Journal of Youth Studies, 22(2), 256–272. https://doi.org/10.1080/13676261.2018.1496406
- Instituto Nacional de Estadística. (2021, January 28). Estadística de Migracionees (EM). Primer semestre de 2020 [Press release]. https://www.ine.es/prensa/cp_j2020_p.pdf
- International Monetary Fund. (April 2021). World Economic Outlook: Managing Divergent Recoveries. https://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021
- International Labour Office. (2013). Enhancing Youth Employability: The Importance of Core Work. Skills for Employment Policy Brief. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/--ifp skills/documents/publication/wcms 234467.pdf
- Katzenbach, J. R., & Smith, D. K. (1993). The discipline of teams. Harvard Business Review, 71(2), 111–120.
- Koris, R., & Vuylsteke, J. F. (2020). Mission (im)possible: Developing students' international online business communication skills through virtual teamwork. In H. Helm & A. Beaven (Eds). Designing and implementing virtual exchange-a collection of case studies (pp. 69-79). Research-publishing.net. https://doi.org/10.14705/rpnet.2020.45.1116
- Langa, M., Ndelu, S., Edwin, Y., & Vilakazi, M. (2017). #Hashtag: an analysis of the #FeesMustFall movement at South African universities. Centre for the Study of Violence and Reconciliation. https://www.africaportal.org/publications/hashtag-an-analysis-of-the-feesmustfall-movement-at-southafrican-universities/
- Lee, J. (2018). The effects of knowledge sharing on individual creativity in higher education institutions: Sociotechnical view. Administrative Sciences, 8(2), 1–16. https://doi.org/10.3390/admsci8020021
- Lohmann, G., Pratt, M. A., Benckendorff, P., Strickland, P., Reynolds, P., & Whitelaw, P. A. (2019). Online business simulations: Authentic teamwork, learning outcomes, and satisfaction. Higher Education, 77(3), 455-472. https://doi.org/10.1007/s10734-018-0282-x
- López Rupérez, F. & García, I. G. (2020). España vs. Portugal en educación. Una aproximación sistémica. Revista Iberoamericana de Educación, 84(1), 193–215. <u>https://doi.org/1</u>0.35362/rie8414042
- Maluleke, R. (2020). Mid-year population estimates 2020. Statistics South Africa. http://www.statssa.gov.za/publications/P0302/MYPE 2020 Presentation.pdf
- Marasi, S. (2019). Team-building: Developing teamwork skills in college students using experiential activities in a classroom setting. Organization Management Journal, 16(4), 324–337. https://doi.org/10.1080/15416518.2019.1662761
- Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. Journal of Management, 34(3), 410-476. https://doi.org/10.1177/0149206308316061
- Ministerio de Educación y Ciencia . (2007). Real Decreto 1393/2007, de 29 de Octubre, Por El Que Se Establece La Ordenación de Las Enseñanzas Universitarias Oficiales. https://www.boe.es/buscar/pdf/2007/BOE-A-2007-18770-consolidado.pdf
- Moyo, K. (2021, November 18). South Africa reckons with its status as a top immigration destination, apartheid history, and economic challenges. https://www.migrationpolicy.org/article/south-africa-immigrationdestination-history

Nunnally, J. C. & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

- Ornellas, A., Martínez-Román, M. A., Tortosa-Martínez, J., Casanova, J. L., das Dores Guerreiro, M., & Engelbrecht, L. K. (2017). Neoliberalism and austerity in Spain, Portugal and South Africa: The revolution of older persons. Journal of Gerontological Social Work, 60(6-7), 535–552. https://doi.org/10.1080/01634372.2017.1324935
- Plotnikova, N. F., & Strukov, E. N. (2019). Integration of teamwork and critical thinking skills in the process of teaching students. Cypriot Journal of Educational Sciences, 14(1), 1–10. https://doi.org/10.18844/cjes.v14i1.4031
- QS Quacquarelli Symonds (2021, March 23). Out now: QS world university rankings 2021. https://www.topuniversities.com/university-rankings-articles/world-university-rankings/out-now-qsworld-university-rankings-2021

Ramsden, P. (2003). Learning to teach in higher education. Routledge.

- Reid, R., & Garson, K. (2017). Rethinking multicultural group work as intercultural learning. Journal of Studies in International Education, 21(3), 195–212. https://doi.org/10.1177/1028315316662981
- Riebe, L., Girardi, A., & Whitsed, C. (2016). A systematic literature review of teamwork pedagogy in higher education. Small Group Research, 47(6), 619–664. https://doi.org/10.1177/1046496416665221
- Roberts, A. P., Webster, L. V., Salmon, P. M., Flin, R., Salas, E., Cooke, N. J., Read, G.J., & Stanton, N. A. (2022). State of science: Models and methods for understanding and enhancing teams and teamwork in complex sociotechnical systems. Ergonomics, 65(2), 161-187. https://doi.org/10.1080/00140139.2021.2000043
- Sánchez de Madariaga, I. (2018). Las carreras de las mujeres en la arquitectura. Politicas, planes y actuaciones. In L.C. Pérez-Moreno (Ed). Perspectivas de género en la arguitectura. Primer Encuentro (pp. 55–78). Abada Editores.
- Schleicher, A. (2019). PISA 2018: Insights and interpretations. Organisation for Economic Co-operation and Development. https://bit.ly/3MtiOPt
- Shaw, J. B. (2004). A Fair Go for All? The Impact Of Intragroup Diversity and Diversity-Management Skills on Student Experiences and Outcomes in Team-Based Class Projects. Journal of Management Education, 28(2), 139-169. https://doi.org/10.1177/1052562903252514
- South African Qualifications Authority. (2000). The National Qualifications Framework and curriculum development. https://www.saqa.org.za/docs/pol/2000/curriculum_dev.pdf
- Tight, M. (2021). Twenty-first century skills: meaning, usage and value. European Journal of Higher Education, 11(2), 160-174. https://doi.org/10.1080/21568235.2020.1835517
- Tuckman, B. W. (1965). Developmental sequence in small groups. Psychological Bulletin, 63(6), 384–399. https://doi.org/10.1037/h0022100
- University of Cape Town. (2013). Teaching and Learning at UCT. https://bit.ly/3BZUjdo
- University of Cape Town. (2020). Factsheet 01: About UCT.
 - http://www.news.uct.ac.za/images/userfiles/files/publications/factsheets/UCT_FactSheet_01_AboutUCT .pdf
- Universitat Politècnica de València. (2019). Memoria del curso académico 2019-2020. https://www.upv.es/entidades/SG/infoweb/sg/info/U0891086.pdf
- Universitat Politècnica de València. ILO(2020). Proyecto Institucional Competencias Transversales. https://www.upv.es/entidades/ICE/info/Proyecto Institucional CT.pdf
- Wilson, L., Ho, S., & Brookes, R. H. (2018). Student perceptions of teamwork within assessment tasks in undergraduate science degrees. Assessment & Evaluation in Higher Education, 43(5), 786–799. https://doi.org/10.1080/02602938.2017.1409334
- World Bank. (2020). Country profile: Spain. https://data.worldbank.org/country/spain?view=chart
- Žiūraitė, V. (2019). Nationalism in the context of politics of change in Spain. Social Transformations in Contemporary Society, 7, 162–170.

https://193.219.57.220/bitstream/handle/007/16457/STICS 2019 7 162-170.pdf?sequence=1&isAllowed=y