### **Resilience and Ethics in Dance Education**

### **Scoping Review**



Heidi Marian Haraldsen

Michelle Schachtler Dwarika

Einar Thor Jonsson

Oslo National Academy of the Arts

Academy of Dance

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Authors: Heidi Marian Haraldsen (all chapters), Michelle Schachtler Dwarika (all chapters), & Einar Thor Jonsson

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Questions concerning this report may be addressed to:

Heidi M. Haraldsen, Academy of Dance, Oslo National Academy of the Arts, <a href="mailto:heidhara@khio.no">heidhara@khio.no</a> +47 92 09 60 66

#### Heidi Marian Haraldsen

Born in Oslo, Norway. Heidi is Associate Professor in Education/Pedagogy and Head of the teacher certification program at KHiO. At KHiO she has taught and worked with research in art education and educational psychology since 2008. Heidi has a bachelor's degree in Dance from the Academy of Dance at KHiO, and has long experience as an artist, practicing as a dance teacher, choreographer, and dance performer with a special interest in artistic community work. Her academic background stem from the University of Oslo, the Faculty of Educational Sciences, where she completed her degree (cand. ed.) with a dissertation of aesthetic education and aesthetic learning. She has also worked as editor and co-author for teaching materials in dance subjects through the book series 'Scenetreff' at Tell publishing company. Heidi completed her doctoral thesis at Norwegian School of Sport Sciences in 2019 on motivational processes within talent development in a comparative perspective on performing arts and sport. Her research is within teaching and learning in the arts, as well as several topics within performance psychology.

### Michelle Schachtler Dwarika

Born in Basel, Switzerland, Michelle has an MA in theatre, arts and sciences from the University in Oslo and an MAS in Dance Science from the University in Bern. Since 2021 she is working towards a diploma in Cognitive Sports Psychology, mentoring dance students at different institutions, such as the Norwegian National ballet school and Oslo National Academy of the Arts. She has been working as an educator at different educational institutions in and around Oslo, Norway and is a research assistant (since 2020), program coordinator for dance and theatre education and guest lecturer in dance psychology (both since 2021) at Oslo National Academy of the Arts. Currently a member of the IADMS dance educator's committee, Michelle is working closely with an international network of dancers and dance educators alike. Her main research interests include autonomy in dance education and resilience and mental health in dance.

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### Summary (abstract)

### **Topic and Aims**

Resilience and Ethics in Dance Education (REDE) is a research project initiated by the academy of dance, at Oslo National Academy of Arts (KHiO). Like dance itself, resilience is a complex and holistic objective, which intersects and relates to physical and mental health and wellbeing. Ethics is a serious and pressing issue for an art form that ontologically has the body at its center.

The REDE Scoping review is an initial step towards creating a research based foundation for future REDE projects. It aims to answer broad questions and examine existing literature on REDE relevant topics of a) teaching and learning in dance (pedagogy), and b) dance and mental health (dance science).

Specifically, the REDE scoping review aimed:

- ✓ To examine how research is conducted in the two REDE topics (methodology)
- ✓ To identify the types of available evidence in the field of (a) teaching and learning in dance and (b) dance and mental health
- ✓ To identify key characteristics or factors related to the two REDE topics in order to inform best practice
- ✓ To identify and analyse knowledge gaps and to prepare future research for the REDE center

### Methods

Research evidence synthesis involves the aggregation of available information using well-defined and transparent methods to search, summarize, and interpret a body of literature. As such, the scoping review applied a systematic and iterative approach to test or confirm the relevance and quality of evidence and identify gaps and trends in the current evidence. Additionally, the PRISMA guidelines and the Rayyan screening tool supported the screening and analysis process, resulting in a

flow chart presenting an overview of the undertaken procedures. To assist this process, we collaborated with the library at KHiO, who completed the initial ad main screening procedures.

We have used the concept of western theatre dance to align with the study portfolio of the department of dance at KHiO. We wanted to target different stakeholders and included samples of dance students, dancers, preprofessional dancers, professional dancers, vocational dancers, dance teachers and dance leaders age 13 and upwards.

The final searches were conducted on 16 February 2021 in the databases of Academic Search Ultimate (EBSCO-host), International Bibliography of Theatre and Dance (EBSCO-host), Education source (EBSCOhost), ERIC (EBSCOhost), SPORTDiscus (EBSCOhost), Medline (EBSCOhost), and PSYCInfo (Ovid), all of which yielded 3893 results. After the removal of duplicates, adding manual search results, and screening procedures in Rayyan, a total of 196 included studies were categorized and thematically analyzed in full text.

### Main results and discussion

In the examination of how research was conducted, it became clear that the research within the two main topics of teaching and learning in dance (pedagogy) and dance and mental health (dance science) were methodologically heterogeneous and positioned within different methodological research paradigms, affecting both the research quality and the applicability of the research. We identified a lot of anecdotal evidence and qualitative smallscale studies in research on dance teaching and learning, and many empirically based and high quality studies in dance and mental health. However, many lacked explorative and applied approaches. More methodological rigor and systematic approaches are needed in dance research especially within the field of pedagogical and practice-based dance research. Additionally, more studies on professional, mature, and retired dancers, and more

applied quality research integrating theory and practice are warranted.

The scoping review identified three main themes within the topic of teaching and learning in dance: dance culture, learning-process, and being. A key finding in the first theme, dance culture, showed that dance practice is highly culturally constituted. It is affected by the worldviews of the two main teaching paradigms of traditionalism and progressivism, implicitly influencing the assumptions, beliefs, structures, power relations, ethics, aesthetics, and behavior of the dance teachers, dance students, and dancers.

These overarching paradigms in the dance culture set important frameworks for teaching and learning in dance. This then affects the *learning-processes* in two ways. Either by being mainly teacher-centered in line with the more traditional, individualized, and authoritarian conservatoire model, or being a student-centered model based on more democratic, authoritative, and collaborative ways of learning. The latter has proved to be more beneficial in relation to the third theme of *being*, since it seemed to nurture enhanced motivation, enjoyment, achievements, health, and well-being.

Turning to the second topic - dance and mental health, the scoping review identified two main themes: stressors and coping with stressors. A set of stressors exist as determinants related to mental health (i.e., cultural, interpersonal, environmental, situational, and personal), which affects the mental health of dance students, dancers, and dance teachers. A key finding was that tradition runs deep in dance culture, and stressors such as cultural, interpersonal, and environmental are mainly culturally embedded, which link the review's first topic of teaching and learning in dance directly to the topic of dance and mental health. Another key finding was the identification of a range of personal stressors. This revealed the dance students and dancers themselves, in

many cases were their own worst enemy, adding a lot of pressure *from within* in addition to contextual and external stressors.

Focussing on the second identified theme coping with stressors, the scoping review identified some important general coping variables such as motivational quality, creativity, and emotional intelligence, all of which seemed important either for the development or the promotion of coping strategies and coping processes when faced with a range of different stressors. Key findings were that adaptive coping is linked with agency, autonomy, meaning and purpose, as well as social support, care, and student-centered teaching and learning. On the other side, maladaptive coping is related to external control, performance-orientation, contingent self-worth, stress, pressure, anxiety, and risk behavior such as perfectionism, obsessiveness, and overtraining.

### Conclusion

A key conclusion is the evidence-based need for a paradigmatic shift into more studentcentered teaching and learning in dance. We found signs of this shift already in practicebased action research interventions and casestudies in the field. These focused on testing out new strategies, to embodied somatic learning, skill acquisition, enquiry-based and student-centered learning, agency, and coproduction in performance, and enhancing the 21st century skills of critical thinking, creativity, communication, and collaboration. However, we are questioning if these studies and examples are representative of the 'few eager and progressive' instead of 'the many' in the dance field, since the evidence identified many instances of conservatoire-style dance teaching where the student must conform to the ideal requirements of the tradition, culture, identity-roles and way of instruction and learning. Also, evidence from research on dance students' and dancers' health and well-being underpin many occupational hazards and some ethical challenges. This

highlights that perhaps pedagogical change is not that reflected in parallel outcome data.

Performance culture and teaching paradigms are controllable and changeable. Hence, teacher education in dance is key, which should be evidence-based and about more than syllabus and dance-technical methodology. Also, a key could be to carry out more research-based pilot projects and practice-based interventions from 'within' to aid the implementation process and to systematically learn from best practice.

### Introduction

## Resilience and Ethics in Dance Education (REDE) Overarching Project

Resilience and Ethics in Dance Education (REDE) is a research project initiated by the academy of dance, at Oslo National Academy of Arts (KHiO). The future goal of the project is to establish a national center of excellence in teaching (Senter for fremragende utdanning). The REDE center aims to empower dance students and strengthen their future professional potential. The project will approach this vision by exploring means and strategies for learning that can a) strengthen the learning environment in dance and b) educate resilient, reflective and ethically aware dance artists who can work sustainably and professionally, both independently and as part of collective processes. Over the last decade, the importance of resilience and mental health, ethical challenges and distribution of ownership and power have altered the approach to teaching at the Academy of Dance as well as in the professional field of dance in general.

Like dance itself, resilience is a complex and holistic objective, which intersects and relates to physical and mental health and wellbeing, confidence building, and motivation in a learning situation. It is based on embodying crafts and skills, passed on through teaching and learning, and supported by artistic and contextual knowledge and insights. The objective of ethics, or ethical awareness and thinking in dance education, interferes with any considerations or decisions regarding artistic expressions, means and practices, work life and community, both educationally and professionally. Ethics is a serious and pressing issue for an art form that ontologically has the body at its center. Discussions on discrimination, identity, power and equality are performed and manifested as bodily realities and are as such directly interrelated and entangled with the objectives of ethics.

This scoping review is an initially step towards the REDE center, to create a research -based foundation for the REDE center and future REDE projects.

### **REDE Scoping Review**

Research evidence synthesis involves the aggregation of available information using well-defined and transparent methods to search, summarize, and interpret a body of literature<sup>1</sup>. A scoping review is a relatively new approach. The purpose of a scoping review is to provide an overview of the available research evidence without producing a summary answer to a discrete research question<sup>1</sup>.

The REDE Scoping review aims to answer broad questions and examine existing literature and other sources of information (i.e., master and phd thesis) on REDE relevant topics. It will also would include findings from a range of different study designs and methods. As the field of Dance Science is a relatively new research area, a scoping review can be a particularly useful approach since few comprehensively reviewed topics exist.

Specifically, the REDE scoping review aims:

- √ To examine how research is conducted in the two REDE topics (methodology)
- √ To identify the types of available evidence in the field of (a) teaching and learning in dance and (b) dance and mental health
- √ To identify key characteristics or factors related to the two REDE topics in order to inform best practice
- √ To identify and analyze knowledge gaps and to prepare future research for the REDE center

Guidance for authors when choosing between a systematic or scoping review approach. BMC medical research methodology, 18(1), 1-7. 416-418

<sup>&</sup>lt;sup>1</sup> Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review?

### Teaching and Learning in Dance

The REDE project aims to put the lens on pedagogical and ethical perspectives related to dance education and dance production. Historically, teaching and learning in dance has been rooted in the apprenticeship learning tradition. This is characterized by being experienced-based, with hierarchical structures, authoritarian and teacher-led teaching methods, and learning based on content-delivery, imitation, and critical feedback.<sup>2, 3</sup>

However, over time, new pedagogical research and trends in society, such as sustainability, feminism, diversity, holism, collaboration, and increased focus on mental health, have inspired dance education towards a more progressive and holistic dance pedagogy<sup>4</sup>. Hence, today's dance education is positioned between the discourses of traditionalism and progressivism<sup>4</sup>. Themes and tensions discussed include, for example:

- a) How the ongoing tensions between tradition and innovation affect teaching and learning in dance
- b) The impact of individual-based master-apprentice relations versus collective, non-hierarchical, and inquiry-based communities of dance practice on teaching and learning dance
- c) How ethical perspectives, such as close relationships, asymmetric power relations, gender issues, diversity, conditional regard, and performance orientation, are reflected in teaching, learning, and performing dance.
- d) How the tensions between the

tacit, embodied and taken for granted vs. reflection, articulation and critical thinking are reflected in teaching and learning dance.

### Dance and mental health

The WHO has defined mental health as follows: "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community".

Thus, REDE is conceptualized in the context of dance and health, especially within performance psychology and dance science. The latter is an ever-growing international research field, based in sports psychology, sports science, medicine and pedagogy. It promotes and enables evidence-based research in dance and encourages the dance field to be firmly rooted in evidence-based knowledge. This also entails viewing dancers and the dance field as holistic entities.

The REDE scoping review aims to connect and contribute to the dance science field. Themes discussed include, for example:

- a) The impact of dancers' personal, psychological and mental factors
- The impact of various stressors and challenges connected to a dance career and dance culture as a whole
- How to manage stressors such as pressure, stress, expectations by means of coping strategies, recovery and self-compassion
- d) The role of resilience through positive psychology, creativity, and mo-

<sup>&</sup>lt;sup>2</sup> Burwell, K. (2013). Apprenticeship in music: A contextual study for instrumental teaching and learning. International Journal of Music Education, 31(3), 276-291.

<sup>&</sup>lt;sup>3</sup> Lakes, R. (2005). The messages behind the methods: The authoritarian pedagogical legacy in western concert dance technique training and rehearsals. Arts Education Policy Review, 106(5), 3-20.

<sup>&</sup>lt;sup>4</sup> Dragon, D. A. (2015). Creating cultures of teaching and learning: Conveying dance and somatic education pedagogy. Journal of Dance Education, 15(1), 25-32.

- tivational quality for optimal functioning and artistic performance
- e) The impact of educational environments on mental health and wellbeing

### **Research Questions**

The REDE scoping review has two research questions related to each of the REDE topics.

### **Topic 1: Teaching and learning in dance**

RQ1: What characterizes the teaching and learning in western theatre dance?

RQ2: How does the teaching and learning tradition impact on identity, interrelationships, agency, teaching practice, and ethics in dance students, dance teachers, and professional dancers?

### **Topic 2: Dance and mental health**

RQ1: What are the mental health statuses and challenges in Western theatre dance students, teachers, and professional dancers?

RQ2: Which factors influence, impact, or relate to dance students', teachers', and dancers' mental health?

### Methods

The scoping review applied a systematic approach to test or confirm the relevance and quality of evidence and identify gaps and trends in the current evidence<sup>5</sup>. Additionally, the PRISMA<sup>6</sup> guidelines supported the screening and analysis process, resulting in a flow chart presenting an overview over the undertaken procedures.

Contrary to literature reviews, scoping reviews are informed by an a priori protocol (see appendix 1) and often include exhaustive searching for information<sup>7</sup>.

### **Context & Population**

We have used the concept of western theatre dance to align with the study portfolio of the department of dance at KHiO. Western theatre dance tradition is artistic dance developed in western Europe from the renaissance period and forward. It focuses on dance as art and consists of the development and professionalization of the current dance genres such as classical ballet, jazz dance and contemporary dance.

To target the context of this dance tradition we have included concepts such as vocational dance, professional dance, (classical) ballet, jazz (dance), contemporary dance (incl., improvisation, creativity), modern dance, and performing arts.

### Concretization of the population:

We wanted to target different stakeholders in the tradition of western theatre dance and included samples of dance students, dancers, pre-professional dancers, professional dancers, vocational dancers, dance teachers and dance leaders.

Age: 13 and upwards

### Search Strategy & Procedure

The search strategy of a scoping review is an iterative process of several phases. The process consisted of an initial search screening, a main search screening and a supplemental manual search screening. To assist this process, we collaborated with the library at KHiO, who completed the initial ad main screening procedures.

### Eligibility criteria

- ✓ Peer reviewed studies in scientific journal from 1980-present
- Master and PhD theses from Norwegian or Nordic context
- √ Research written in Nordic or English language
- √ Original research and reviews
- Including samples of dance students and professional dancers in the context of western theatre dance (ballet, jazz, contemporary) at age 13 and older and dance teachers from the same context
- √ Relevant to answer the research questions

### Initial screening

Prior to performing the actual search, the initial procedure was twofold and consisted of first determining suitable search terms based on those deemed relevant by the research

<sup>&</sup>lt;sup>5</sup> Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC medical research methodology, 18(1), 1-7. 416-418

<sup>&</sup>lt;sup>6</sup> Arya, S., Kaji, A. H., & Boermeester, M. A. (2021). PRISMA Reporting Guidelines for Meta-analyses and Systematic Reviews. JAMA surgery.

<sup>&</sup>lt;sup>7</sup> Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC medical research methodology, 18(1), 1-7. 416-418

protocols and second of identifying which databases to utilize.

### **Identify search screening terms**

Based on the eligibility criteria of source material, key terms for the search string were formulated in both English and Norwegian. The search string was then employed in each database in accordance with their respective system parameters. The search terms were tested individually and in various combinations to ascertain the viability of each within the search string. Since the scoping review consists of two different topics, an attempt was made to devise two separate search strings, one for each topic. In order to demarcate the two strings, the search at this stage included outcome criteria in addition to population and context. This proved detrimental to the results, and a decision was made to apply the outcome criteria only during the subsequent screening to separate the two topics. Therefore, the search strategy after this stage did not make a distinction between the two topics, instead a combined search string was used to extract as many relevant results as possible for the scoping review as a whole.

The final search string in English consisted of these terms and combinations:

("dance student\*" OR dancer\* OR "dance teacher\*" OR "dance leader\*" OR "ballet student\*" OR "ballet teacher\*" OR "ballet leader\*") AND ("western theatre dance" OR "dance education" OR "dance pedagog\*" OR "classical ballet" OR "jazz dance" OR "contemporary dance" OR conservato\* OR "talent identification" OR "development in dance" OR "aesthetic learning" OR apprentice\*)

The first part of the string consists of the terms related to the population, while the second consists of those related to the context. By a trial-and-error process a number of terms were removed that, although relevant to the project itself, were deemed unsuited to the search, and the results retrieved. The rationale was that some additional non-relevant

results were preferable in comparison to losing some relevant results.

In order to retrieve these and similar material from a Norwegian context, a search string consisting of terms translated into Norwegian was used in Oria (BIBSYS). Limiters for this search were: "Date of publication: 1980-", and "Material type: "Bøker, Artikler, Masteroppgaver, Doktorgradsavhandlinger, Avhandlinger, Bokkapitler".

The reason for not including a limit on date of publication in the other databases was simply that the differences in results were negligible. Since Oria consists of a larger number of different types of bibliographic resources, many dating back to before the 1980s, the limiter was deemed necessary for this search. Oria does not fully support extensive truncation so the search string had to be modified to optimize the search. The final search string in Norwegian consisted of these terms and combinations:

(danse\* OR ballett\*) AND (danseundervisning OR undervisning OR dansepedagogikk OR pedagogikk OR dansedidaktikk OR didaktikk OR danseutdanning OR utdanning OR læring OR "høyere utdanning" OR jazzdans OR "klassisk ballett" OR "scenisk dans" OR samtidsdans)

### Database searches

Certain databases were excluded due to inadequate search capabilities, and in a few cases due to lack of institutional access, e.g., Scopus. The following electronic databases were searched using this search string:

- Academic Search Ultimate (EBSCOhost)
- ✓ International Bibliography of Theatre and Dance (EBSCOhost)
- √ Education source (EBSCOhost)
- √ ERIC (EBSCOhost)
- ✓ SPORTDiscus (EBSCOhost), Medline (EBSCOhost)
- √ PSYCInfo (Ovid).

The chosen limitations for each search within the databases were: "Apply equivalent subject" and "Peer reviewed only".

### Main search screening

The final searches were conducted on 16 February 2021 and yielded the following number of retrieved results:

Table 1. Database search

Database platform	Database	Number of results
EBSCOhost	International Bibliography of Theatre and Dance	1065
	Education source	635
	ERIC	318
	Academic Search Ultimate	617
	SPORTDiscus	580
	Medline	214
Ovid	PSYCInfo	139
BIBSYS	Oria	325
-	(DUO)	(56)

This amounts to 3893 results prior to the removal of duplicates using Endnote. Note that the results from DUO are not included in this total (see the following paragraph).

To increase exhaustivity when locating potential theses or dissertations in Norwegian, a search was conducted in the DUO and NTNU Open repositories. Due to the limited search capabilities in each repository, the search string was considerably simplified. Additionally, there is no function for exporting search results, which necessitates a manual approach. The relative specificity of the subject matter made it clear that a broad search in DUO would enable the retrieval of all relevant material, while at the same time a manual selection process in the search result list would not be overly time-consuming. The terms used in the DUO search were: danse\* OR ballett\*. This yielded 56 search results, which is a manageable amount for manual selection. The search functionality in NTNU Open was determined to be unsatisfactory. However, NTNU maintains a list of all master's theses published in connection with their dance program which number 57 publications in total. That makes a search unnecessary since the relevant

material can more easily be identified by manually browsing these publications. Other eligible sources included Google Scholar and Idunn, which were excluded based on low relevance and/or limited search capabilities. In the case of Google Scholar, a combination of restrictions in the search interface combined with lack of export functions made it unmanageable for this particular project. Finally, a number of journals where a manual search was necessary were identified: "Nordic Journal of Dance", "Journal of Research in Arts and Sports Education", and "Dance Articulated" (formerly named "På Spissen"). The reason was that they contained material not electronically indexed in any of the databases. This included searching the physical issues of the journals in question.

### Identifying and removing duplicates

The identification of duplicates was performed in Endnote on 25 February 2021. By a process of elimination using different criteria to detect similarities, the total number of duplicates amounted to 1865, leaving a total of 2028 unique references. Due to the built-in sensitivity of the de-duping function in Endnote, some duplicates were not detected. However, the margin of error was deemed to be within acceptable limits and the few remaining duplicates could be spotted and removed during the screening process.

Table 2. Duplicates

Overview of duplicates procedure	Number of results
Total number of references	3893
Number of duplicates identified and removed	1865
Final amount of references after de-duping	2028

The file which contained the 2028 references was then uploaded into Rayyan where the screening process took place.

### Additional manual search screening

An additional manual search has been conducted to detect and implement articles and theses either recently published (2020-) or undetected by the initial search. Specific univer-

sity databases such as DUO and Oria and journals like the Nordic dance Journal and Journal for Research in Arts and Sports Education have been screened with the following terms and combinations:

«Dance\*OR ballet\*»OR «dans\* OR ballet» «\*dance» dance» OR «\*dance OR ballet\*» OR «\*dance» OR «performance art OR classical ballet».

Additionally, another general search in Google Scholar with the following search string have been conducted:

«Performing art\* Western dance theatre dance» OR «Performing art\* contemporary

Consequently, 41 additional articles and theses were included.

### **Data Analysis**

### Identification of relevant studies

The search results were imported into Rayyan<sup>8</sup> for screening. Rayyan is a free web and mobile app, which "helps researchers to expedite the initial screening of abstracts and titles using a process of semi-automation while incorporating a high level of usability" (p. 1).

A blind function in Rayyan enabled the two researchers to screen and label all identified articles without prior knowledge to the preferences and choices taken by each other. The labels used and previously agreed on were 1 for teaching and learning and 2 for mental health. On conclusion of the first screening, a third party removed the blind function, thus making inclusion and exclusion choices by each researcher visible and ensuring trustworthiness in the process<sup>9</sup>. Thereafter, the researchers discussed articles they disagreed on during

the blind function screening. This resulted in the following inclusion/ exclusion criterias<sup>10</sup>:

- ✓ Low quality and/or little evidencebase in the research
- √ Wrong population
- √ Wrong outcome
- √ Wrong publishing type
- √ Wrong language
- √ No or limited availability

As a result, 64 additional articles were excluded from the review.

<sup>&</sup>lt;sup>8</sup>Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—a web and mobile app for systematic reviews. Systematic reviews, 5(1), 1-10.

<sup>&</sup>lt;sup>9</sup>Swann, C., Keegan, R. J., Piggott, D., & Crust, L. (2012). A systematic review of the experience, occurrence, and controllability of flow states in elite

sport. *Psychology of Sport and Exercise*, 13(6), 807-819.

<sup>&</sup>lt;sup>10</sup>Swann, C., Keegan, R. J., Piggott, D., & Crust, L. (2012). A systematic review of the experience, occurrence, and controllability of flow states in elite sport. *Psychology of Sport and Exercise*, *13*(6), 807-819.

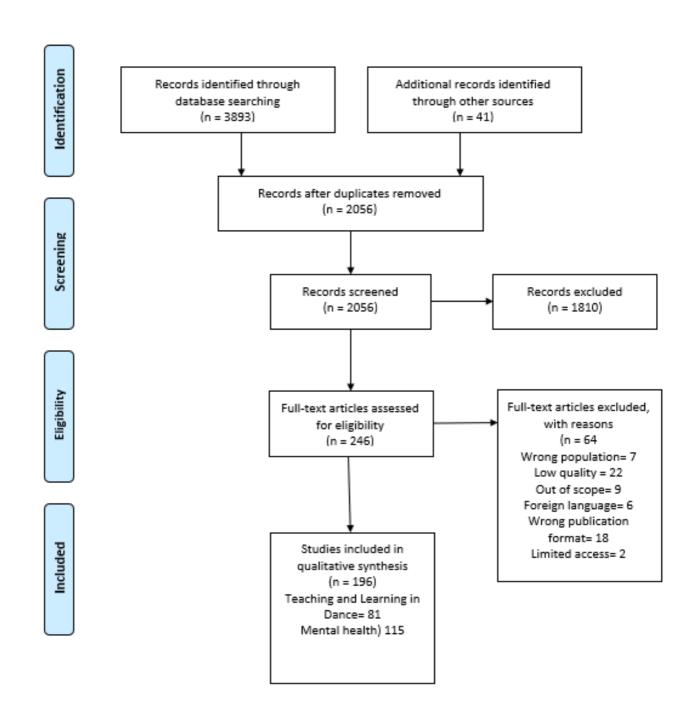


Figure 1. Flow chart of screening process<sup>11</sup>

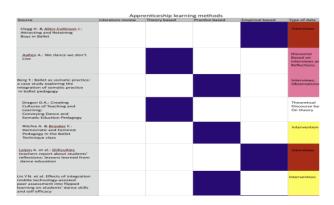
http://www.prisma-statement.org/

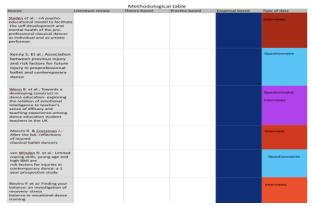
<sup>&</sup>lt;sup>11</sup> Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

### Categorization

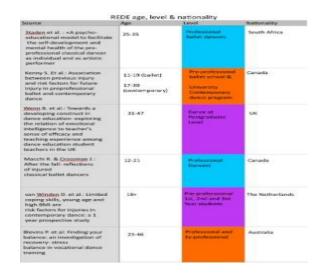
In order to organize the included findings of the blind function screening, the researchers met for a peer debriefing to discuss the articles and their labels. In this process, they created tables organizing the studies into logical categories which served as a base to analyze findings in these categories<sup>12</sup>. Afterwards, the researchers read each article or its abstracts and sorted them by the characteristics identified in the content<sup>13</sup>.

Tables 3-4. Presenting an overview over the different methods applied in the included articles





Tables 5-6. Presenting an overview over the population and nationalities being subject in the articles



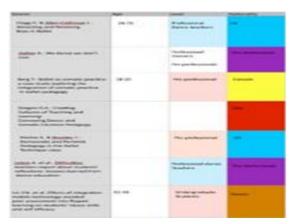


Table 7. An overview of the *journals* in which the articles have been published.

Tidskrift	antall studier	Årstall	nivā NSD	Impact factor	Quality 1-6
Journal of Dance Education	49				
Research in Dance Education	26				
Journal of Dance Medicine and Science	17				
Dissertation abstract international	6				
Theatre, Dance and Performance Training	6				
NTNU open	5				
UBIRA e-theses	5				
Collections of Canada	4				
Dance Research Journal	4				
Medical Journal of Performing Arts	3				
Journal of Dance & Somatic Practices	2				

<sup>&</sup>lt;sup>12</sup> Walker, L. F., Thomas, R., & Driska, A. P. (2018). Informal and nonformal learning for sport coaches: A systematic review. *International Journal of Sports Science & Coaching*, *13*(5), 694-707.

<sup>&</sup>lt;sup>13</sup> Walker, L. F., Thomas, R., & Driska, A. P. (2018). Informal and nonformal learning for sport coaches: A systematic review. *International Journal of Sports Science & Coaching*, *13*(5), 694-707.

Tables 8-9. Presenting an overview over the *topics* represented in the articles

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### Thematic analysis

After the categorization process was conducted and discussed, both researchers analyzed each their section thematically. Such a thematical analysis was undertaken to identify and uncover general trends, red threads and overall, general conclusions that could be gained from the scoping review.

There are various methodological ways in how to examine data and synthesize, conceptualize or gain new insights based on previously conducted systematic research<sup>3, 14</sup> (Booth et al, 2016<sup>4</sup>; Gough et al 2017<sup>3</sup>).

In a synthesis process, the researchers try to identify or discover patterns in the data

(Booth et al, 2016) or compare and contrast, for example, results and methods.

Synthesis usually entails three approaches: a qualitative approach, a quantitative approach and an integrated approach.

For this scoping review, the researchers have chosen to integrate and present results by means of a qualitative and thematic approach (Booth et al, 2016), which seemed to be a common procedure, especially when studies are heterogenic as in this case.

### Applied method within the thematic analysis

- Identify and develop descriptive themes across the included studies
- 2. Within case-approach which entailed summarizing studies within a topic based on content, population, results a.m.
- Between case-approach which entailed developing overarching analytical topics aiming towards the research questions defined in the protocol
- 4. Meta-analysis which entailed identifying general research gaps, missing information and overarching findings and gaps in terms of quality, in-between tensions a.m.

<sup>&</sup>lt;sup>14</sup> Booth, A., Sutton, A., & Papaioannou, D. (2016). Systematic approaches to a successful literature review.

### Results

## General overview over the identified studies

Specifically, the REDE scoping review aimed:

- √ To identify the available evidence in the field of (a) teaching and learning and (b) dance and mental health
  ¨
- √ To examine how research is conducted in the two REDE topics (methodology)
- √ To identify and analyze knowledge gaps and prepare future research for the REDE center

### Methodological overview

Overall, both topics have shown a prevalence in empirical studies. As visible in the diagram below, there were more practical studies and theoretical based research undertaken within teaching and learning. Mental health, on the other hand, was revealed to include very few practical investigations or interventions. In both topics only 4 literature reviews have been identified.

Tables 10. Teaching and learning research design

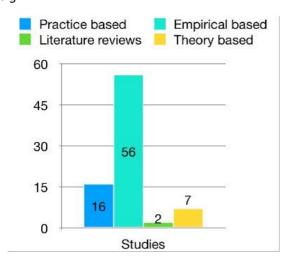
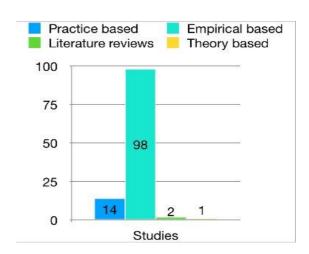


Table 11. Mental health research design



Most studies in Teaching and learning applied a mixed method approach (38 in total), followed by interviews (17), questionnaires (8), interventions (5) and literature-based investigations (6). Only a few adopted methods such as written reflections (1), peer reviews (1) and assessments (1).

Table 12. Teaching and learning methodology

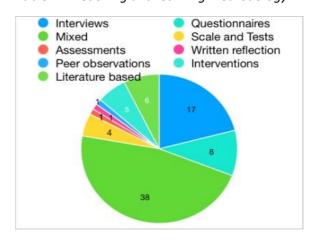
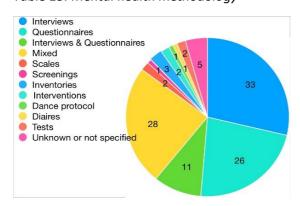


Table 13. Mental health methodology



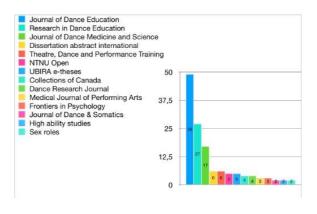
Interviews were identified as the most used method in the mental health section (33), followed by a mixed method approach (28), questionnaires (26) or interviews and questionnaires combined (11). Only a handful of studies applied approaches such as screening (5), scales (2), inventories (3) or interventions (2).

#### **Journals**

A wide variety of journals have been represented in the screening process. The Journal of Dance Education has published most of the included studies in this review (49), followed by Research in Dance Education (27) and Journal of Dance Medicine and Science (17). Fewer articles have been distributed by Dissertation abstract international (6), Theatre, Dance and Performance Training (6), NTNU Open (5), UBIRA e-theses (5) and other journals such as Dance Research Journal (4) and Frontiers in Psychology (3).

Overall, the quality of the published articles varied, independent from the journals or the number of published studies represented in the diagram. A journal could, for example, present a wide range of topics in its portfolio but appeared to have fewer clear demands in terms of rigor, structure and reporting of results, which were then hard to clearly identify.

Table 14. Journal overview



### **Population**

Pre-professional dance students have been the most researched population in both topics (Teaching and learning: 35; Mental Health: 46). Perhaps unsurprisingly there were more dance teachers represented in Teaching and learning (21) while more Professional dancers have been studied within mental health (21).

Both topics had several studies examining mixed populations (Teaching and learning 12; Mental health 20).

Table 15. Teaching and learning population

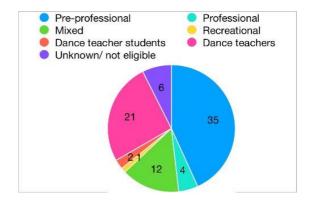
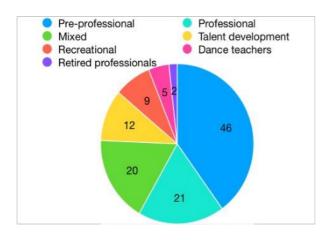


Table 16. Mental health population



The represented age groups varied within the two topics. However, many studies in Teaching and learning didn't enclose the age of their population (52) while dancers aged 10+ have been the most represented population in Mental health (44), followed by 18+ (36). Overall, very few dancers over the age of 25+ have been represented in both topics.

Table 17. Teaching and learning age-range

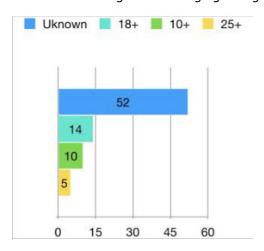
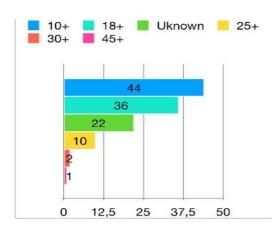


Table 18. Mental health age-range



### **Nationalities**

While many countries have been represented in both topics, the UK (Teaching and learning: 17; Mental health: 35) and USA (Teaching and learning: 26; Mental health: 24) have been the two countries contributing with most published peer-reviewed articles in this scoping review. This was followed by Canada (5 and 10 studies respectively), The Netherlands (5 and 2) and Australia (8 and 3).

Norway (11 and 7 studies respectively) has contributed with the most studies from the represented Scandinavian countries (Sweden: 2 and 4; Finland: 3 and 3).

Table 19. Teaching and learning nationalities

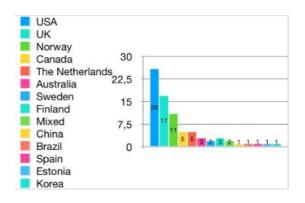
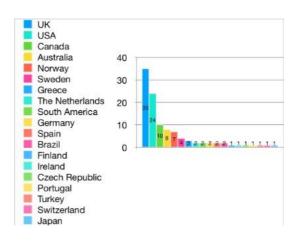


Table 20. Mental Health nationalities



### Results from the Thematic Analyses

Specifically, the REDE scoping review aimed:

- √ To identify the types of available evidence in the field of (a) teaching and learning in dance and (b) dance and mental health
- √ To identify key characteristics or factors related to the two REDE topics in order to inform best practice
- √ To identify and analyze knowledge gaps and to prepare future research for the REDE center

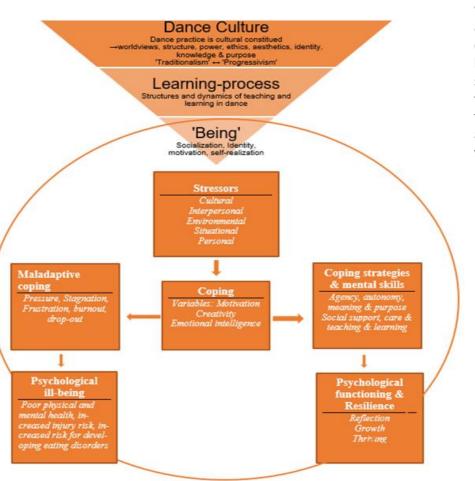
In this result section, we have organized the presentation in two parts: 1) teaching and learning in dance and 2) dance and mental health. However, the two topics overlap and relate to each other.

Figure 2. Thematic overview representing overall findings

Additionally, due to the identification strategy, some studies concern both topics, for example, focusing on a mental health topic, but looking at the issue in light of the culture of teaching and learning in dance (e.g., the association between learning styles and eating disorders). Hence, some studies are analyzed within both sections.

We start by describing the culture of teaching and learning in dance, as an overarching theme directly and indirectly affecting the following themes within both teaching and learning (topic 1) and mental health (topic 2) in dance (see Figure 2).

In the general discussion section, we will take on a meta-perspective and discuss the situation of Resilience and Ethics in Dance Educa-



tion as a whole and draw on both the sub-sections of thematic analyses.

### Topic 1: Teaching and Learning in dance

In this section we present the main themes of the thematic analysis: 1) Dance culture and philosophical pedagogy, 2) Teaching, 3) Learning, 4) Being, and 5) Talent development in dance.

RQ1: What characterizes the teaching and learning in western theatre dance?

RQ2: How does the teaching and learning tradition impact on identity, interrelationships, agency, teaching practice, and ethics in dance students, dance teachers, and professional dancers?

## Dance culture, sociology, and philosophical pedagogy (24 studies)

The review evidently illustrates that dance practice is culturally constructed (Alterowitz, 2014; Aalten, 2005; Pickard, 2012; Rimmer, 2017; Østern, 2017). In a sociology lens, the world of dance can be considered a subculture with its own rules and regulations that offers a prototype of the narrative of 'being' (Aalten, 2005). The process of embodied internalization into the dance culture is at its core and notable in these sociological framed studies. One becomes a 'dancer', socialized into an internal 'language', a type of 'collective' belongingness, and mutual common practices. Being a dancer is a state of being where the 'job' life and personal life is intertwined (Alten, 2005; Demelius, 2003). The job is not a means to an end, but the mean in itself, and important identified aspects are discipline and training, physical challenges, selfdevelopment, self-actualization and the spiritual gratification in expressing dance (Demelius, 2003). Furthermore, within the world of dance, different culturally constituted sub-cultures of dance practices exist (i.e., genres & specific techniques) that are linked to different aesthetics (i.e., body image, movement quality, identity categories, learning processes), ethics (i.e., power and agency), and worldviews in general (Alterorwitz, 2014; Østern, 2017). For instance, the culture of ballet, is described in the literature as a 'greedy' institution and extremely time and energy consuming activity that offers an almost ready made story that is hard to ignore, like entering a convent (Aalten, 2005; Alterorwitz, 2014; Pickard, 2012). In contrast, the subculture of contact improvisation rep-

#### Fact box:

Dance as social practice: Bourdieu's & Foucault's theories The concept of 'habitus' inclines reproducing existing social structures. Habitus is the dispositions that are structured by 'one's past and present circumstances, such as family upbringing, educational and social experiences (Rimmer, 2017). Bourdieu links agency with social structure, by using the concepts of capital and field, and described through the process of habitus. Physical capital, in the form of body shape, manner and posture, is socially produced, and the acquisition of physical capital is essential in domains where the body matters, as in dance. In the dance culture, research has identified fixed ideas such as body image, behavior, gender roles, teaching style and learning processes, asymmetric power relations etc. Your body gives you more or less capital within the dance culture (Rimmer, 2017). The concept of 'doxa' refers to the things that are taken for granted, as in socializing processes, whereby the natural and social world appears as self-evident (goes without saying because it comes without saying). The tacit culture in dance is evident (Dragon, 2015). Doxa relates to a social randomness that is reproduced in social institutions, structures, and culture as in Dance, traced in minds and bodies, expectations, and behavior (Wainwright et al., 2006). The content and practice of doxa is dependent upon what are one's habitus (Rimmer, 2017).

Foucault talks about how one came to look at the body very differently from the beginning of modernity, with the 'Enlightenment period' and the focus on scientific progress. The body became an instrument that could be analyzed, controlled, and scientifically explained, for example, in terms of medicine and anatomy. Foucault addressed and critiqued the extremes of standardizing bodily behavior that has characterized institutions such as military schools, prisons, and mental hospitals; he believed that schools are primarily designed to train docile (passive) citizens, which are bodies that are self-regulated and habituated (Alterowitz, 2014, Green, 1999, 2000, 2003). Foucault shows how this strive for normality works on the level of maintaining power and control through the indirect punishment of feeling shame and non-affiliation in a hierarchy where normality is the most valued feature (Andresen, 2011). The review includes studies that explores how dance has been taught traditionally in the institutions of dance education in relation to this instrumentalist view of the body (Andresen, 2011; Green, 2003).

resents a sub-culture of non-hierarchical, collaborative and inquiry-based shared dance practices (Schupp, 2011).

Table 21. Overview over the two main paradigms in dance education influencing teaching and learning

	Traditionalism	Progressivism
Philosophy	Modernism epoque: science, objectivity, rationalism, in-	Postmodernism epoque: uncertainty, subjectivity, situated, technology
• '	dustrialism, urbanization, institutionalization, bureaucrati-	and media, 'hyper-reality, diversity, hybridity, fragmentation, commer-
	zation	cialism
	Individualism: performance- and skill oriented	Pluralism: Socialism, equality, non-hierarchical
	Universalism: systems of standardized techniques, bodies,	Situated & contextualized: diversity of perspectives, practices, bodies,
	gender, behavior	and expressions
	Nationalism: eurocentrism, colonialism	Globalization: internationalization and local sub-cultures, relativism
Aalten, 2005; A	lterowitz, 2014; Andresen, 2011; Demelius, 2003; Dragon, 2015	; Green, 2000, 2003; Haines & Torres, 2016; Haraldsen et al., 2019, 2021;
Harrington, 202	0; Lakes, 2005; Lindblom, 2020; Minton & Hofmeister, 2010; M	orris, 2003; Pickard, 2013; Rimmer, 2017; Roche & Huddy, 2015;
Rothmund, 201	9; Rowe & Xiong, 2020; Schupp, 2011; Østern, 2017; Østern & I	rgens, 2018; Wainright et al., 2006
Teaching	Conservatoire model: top-down, inherited practice, sociali-	Democratic model: holistic, humanistic, student-centered, feminism,
	zation process, hierarchical structures, teacher-centered,	non-hierarchical, equality
	asymmetric power	Authoritative teacher: mentoring, supervisor, facilitator
	Authoritarian teacher: the 'masters' reproducing tradition,	Internal control: agency, autonomy, empowerment
	based on tacit & experienced-based teaching	Emergent curriculum: based on movement principles, evolving and indi-
	External control: shaping students, bodies	vidualized
	Static curriculum: content & tradition focused, skills-, tech-	Constructivism: active and self-regulated learning, inner awareness, self-
	nique-, steps-, repertoire-oriented, given, static content	inquiry, somatic practice
	<b>Delivery and imitation;</b> reproducing tradition, lecture-and-	<b>Process-oriented:</b> inquiry-based, exploring, creativity, reflection, situ-
	test, do-drill-adjust-repeat	ated, collaborative learning, human goals
	Result-and performance oriented: competitive, perfor-	The students above the art: Dance as education
	mance goals	
	The arts above the student: Dance as performance art	dri 2019: Rihik 1993: Chan et al. 2017: Chua 2017: Clagg et al. 2017

Alterowitz, 2014; Andersson, 2016; Andresen, 2011; Andrzejewski, 2008; Assandri, 2019; Bibik, 1993; Chen et al., 2017; Chua, 2017; Clegg et al., 2017, 2019; Cuellar-Moreno & Caballero-Juliá, 2019; Dragon, 2015; Duffy & Beauty, 2019; Englund & Sandstrom, 2015; Fortin et al., 2002; Green, 1999, Haraldsen et al., 2019, 2020, 2021; Hefferon & Ollis, 2006; Hellem, 2017; Huddy & Stevens, 2014; Keinanen, 2003; Lakes, 2005; Larsen, 2015; Leijen et al., 2008, 2009; Minton & McGill, 1998; Morris, 2003; Nordgård & Haugland, 2014; Rafferty & Wyon, 2006; Ribeiro & Fonseca, 2011; Ritchie, & Brooker, 2019; Rimmer, 2017; Roche & Huddy, 2015; Rothmund, 2019; Rowe & Xiong, 2020; Pickard, 2012; Sims & Erwin, 2012; Schupp, 2011; Tsompanaki & Benn, 2011; Van Rossum, 2004; Warburton, 2010; Østern, 2017; Østern & Irgens, 2018

Learn	ing
-------	-----

**Competence:** Given, bounded, specific system/technique, normative, defined, particular

**Behaviorism and cognitivism:** knowledge is transmitted from instruction, passive role, knowledge and content-based

**Teacher-led and controlled**: subject centered, monitoring, control, and discipline

**Individualized and competitive learning climate:** competitive, ego-oriented, individualized

**Competence:** constructed, free, generic principles/open-technique, individual, undefined, holistic

**Constructivism and social-cultural learning**: knowledge is constructed by student, active role, inquiry-based

Student-centered: needs/person-centered self-regulated, critical reflection and agency

**Collaborative and supportive learning climate**: Interaction, collaboration, sharing

Alterowitz, 2014, Andresen, 2011; Andersen, 2018; Berg, 2017; Bibik, 1993; Bolles & Chatfield, 2009; Dolva, 2012; Dragon, 2015; Green, 1999; Haraldsen et al., 2019, 2020, 2021; Higdon & Stevens, 2017; Larsen, 2015; Leijen et al., 2016; Lin et al., 2019; Minton & Hofmeister, 2010; Minton & McGill, 1998; Petsilas et al., 2020; Rimmer, 2017; Risner, 2000; Ritchie & Brooker, 2019; Roche & Huddy, 2015; Rothmund, 2019; Schupp, 2011; Seago, 2020; Spohn & Spickard Prettyman, 2012; Weber, 2009.

### Being

### The performance narrative:

**Identity categories:** stereotype categories, the 24/7 performer, single/narrow – identity, performance-based identity

Gender views: stereotype gender roles

**Motivation:** ego-involvement, controlled motivation, perceptions of performance climate

#### The holistic narrative:

**Identity categories:** pluralism, diverse identity categories, holistic -based identity

 $\textbf{Gender views:} \ \text{feminism \& queer -based ideals of diversity}$ 

**Motivation:** task-involvement, autonomous motivation, intrinsic motivation & flow

Aalten, 2005; Alterowitz, 2014; Bibik, 1993; 2019; Chua, 2017; Clegg et al., 2018 2019; Duffy, 2020; Demelius, 2003; Fitz, 1999; Green, 1999, 2000, 2003; Haraldsen et al., 2019, 2020, 2021; Harrington, 2020; Hefferon & Ollis, 2006; Higdon & Stevens, 2017; Khudaverdian, 1998; Lakes, 2005; Morris, 2003; Nieminen et al., 2001; Pickard, 2012; Ritchie & Brooker, 2019; Risner, 2002; Slater & Tiggemann, 2002; Wainwright et al., 2006; Østern & Irgens, 2019; Østern, 2017;

Well-being & health

**Positive:** offers a rich social life within, meaning and purpose, spiritual gratification

**Negative:** conflict between living and dancing, stereotype and restricted identity, conditional self-worth, lack of agency, self-denial, anxiety, burnout, physical and emotional distress,

perfectionism, controlled motivation, obsessiveness, dysfunctional habits, stress, pressure, abusive environments, loss of creativity and thriving **Positive:** increased learning outcome, student engagement and motivation, agency and empowerment, autonomous motivation, flow, enhance creativity and reflection, internal focus, resilience, vitality, self-esteem, growth and thriving.

**Negative:** students highly socialized in the traditionalism way find the progressive way frustrating, waste of time, and demotivating.

Aalten, 2005; Alterowitz, 2014; Andresen, 2011; Bibik, 1993; 2019; Chua, 2017; Clegg et al., 2018 2019; Duffy, 2020; Demelius, 2003; Fitz, 1999; Green, 1999, 2000, 2003; Haines & Torres, 2016; Haraldsen et al., 2019, 2020, 2021; Harrington, 2020; Hefferon & Ollis, 2006; Higdon & Stevens, 2017; Khudaverdian, 1998; Lakes, 2005; Morris, 2003; Nieminen et al., 2001; Pickard, 2012; Ritchie & Brooker, 2019; Rimmer, 2017; Risner, 2002; Rothmund, 2019; Schupp, 2011; Slater & Tiggemann, 2002; Østern, 2017; Østern & Irgens, 2019; Wainwright et al., 2006

A teacher, as a member of a such a profession, is socialized into traditions and power structures that may reinforce certain assumptions, worldviews, and practices. In the dance field, these assumptions, worldviews, and practices are, in addition, clearly embodied. In teaching dance, methods of teaching and learning are found to be silently embedded into dance classrooms experiences without explicity offering explanations to students of the origins, purposes, or philosophies underlying these methods (Dragon, 2015; Haraldsen et al., 2020). The socialization is not only about ways of seeing the world but is also about being in it in certain ways, embodying and often passing on dance pedagogies that have crossed your way. As such the social learning also indirectly shapes our ethics (Dragon, 2015, Østern & Irgens, 2018). An history of an experience based apprenticeship-learning tradition-'teaching the way you were taught'- is evident in several studies (e.g., Alterorwitz, 2014; Andresen, 2011; Green, 2003). Anecdotal evidence from participants suggests that ballet pedagogy has not evolved at the same rate as changes in the other art forms, nor has it fully reflected the increasingly socially aware society in which the art form exist (Dragon, 2015; Lindblom, 2020; Morris, 2003; Rowe & Xiong, 2020).

For the dance student or the dancer, the prototype of being in the specific context of dance education and training, might become the prevalent norm system for self-surveillance of proper behavior (Andresen, 2011; Green, 2003). The dance student is expected to conform to the norm both in appearances, dress code, and manner of training the body as well as how to move and how to behave in the dance studio according to the specific dance technique in question (Green, 2017, Østern, 2017). Green (1999; 2000; 2003) concludes: "this shift towards surveillance, and particularly self-surveillance, has been effective in training docile dance performers, but not so effective in producing dance artists who take ownership of their bodies and artistic processes" (Green, 2003, p. 39). Findings of a study from the Norwegian context confirm the existence of an unconscious docility, especially from the teachers own experiences.

However, the teachers expressed they would be interested in making some changes from their own dance education, and they wished to encourage individuality and challenge existing norms (Andresen, 2011).

#### Fact box:

### How authoritarian pedagogy in dance might look like

"The authoritarian personality structure harbors such characteristics as low opinion of human nature, punitiveness, fatalism, contempt for the weak, cynicism, aggression, an ironic submission to authority, intolerance for ambiguity, and projection, ascribing to another person attitudes present in oneself. Specific authoritarian teaching behaviors evidenced in dance technique classes and rehearsals range over many examples. They can include rote imitation and repetition over time with unchanging verbal prompts from the teacher. They can escalate to humiliation of students for making errors, screaming, sarcasm, mocking, belittlement, barbed humor, and bullying. Questions are dismissed or squelched, and the questioners degraded. Some teachers exhibit preoccupation with arbitrary behavioral control, engage in unfair or negative comparisons to other students, encourage rivalries, refer to adult students as "girls" and "boys," and use other forms of infantilization or patronization. Others employ inappropriate personal attributions not based on fact or comments that violate privacy codes, including some shaming or denigrating comments about students' weight, build, or body type. Then there is the alternative of silence or withholding of feedback and responses or, at the least, giving only backhanded compliments. Teachers exhibit frustration and impatience if there is no immediate and continued mastery of the material presented; some ignore certain students, or storm out of the room in an exasperated rage out of disappointment or anger. Some even engage in physical abuse in the form of hitting, slapping, or punching body parts with a hand or a stick. Both physical actions and verbal attributions that seek to render the student powerless are often delivered in a demeaning fashion. These messages can be transmitted to dance students through direct verbal language, adjunct verbal asides, and tone of voice, or through unspoken forums such as the use of silence, eye usage, and eye contact (or lack thereof). They can be transmitted through body language, as in particular kinds of posture or gesture. They can also be conveyed through the choice of classroom activities" (Lakes, 2005, p. 4).

Hence, the worldviews, or the overarching paradigms in the dance culture set important frameworks of teaching and learning in dance. The scoping review has identified two main educational paradigms that can be traced to

different practices and experiences of teaching, learning, and being as a dance student, dancer, or a dance teacher: *traditionalism and progressivism*.

Educational traditionalism is linked to the 'modernism' or 'modernity' epoque described in the theory of sociology (i.e., Giddens). It is an era characterized by scientific thought, rationalism, individualism, a focus on industrialization, urbanization, institutionalization, bureaucratization and technical development, and a rejection of some traditional and metaphysical values. In the field of dance, we can see this in three distinct characterizations; universalism (i.e., systems of standardized techniques for all, standardized bodies and gender identities), individualism (i.e., self-realization of own potential, individual performance and skill- development), and nationalism (i.e., eurocentrism, colonialism; Østern, 2017). Traditionalism is typically linked to traditional authoritarian and conservatoire-style dance teaching utilizing a hierarchical, teacher led and authoritarian approach through which the student must conform to the ideal requirements of the tradition, culture, identity-roles and conventional technique (Alterowitz, 2014; Dragon, 2015).

On the other hand, the 'post-modern' or 'post-modernity' epoque, is a movement of oppositions towards the modernism values, of skepticism, irony, or rejection toward all that is describes as the grand narratives and ideologies associated with modernism (Alterowitz, 2014; Østern, 2017). The educational progres*sivism* is inspired by post-modernity, but also by critical theory and progressive pedagogy (i.e., democratic, feminism, public, and social pedagogy; Alterowitz, 2014; Dragon, 2015; Hofmeister, 2019; Rowe & Xiong, 2020; Schupp, 2011). These pedagogies embrace less hierarchical models of instruction, creation, and performance strategies that encourage individual inquiry, self-discovery, and collaboration to challenge traditional, patriarchal teaching strategies and to replace them with strategies that promote equity among all students in the classroom (Alterowitz, 2014). Recently, the concept of 21st century skills (i.e., critical thinking, creativity, communication,

and collaboration) is been associated with the progressivism paradigm, with the gaze towards the future (Alterowitz, 2014; Minton & Hofmeister, 2010; Rowe & Xiong, 2020). In the field of dance, the progressivism paradigm focuses on situated and contextual local knowledge, uncertainty and doubt, subjectivism, diversity of perspectives, practices, bodies and expressions, dialogue, critical reflection, and agency and alternative power structures. (Dragon, 2015; Østern, 2017).

#### Fact box:

#### Characterizations of progressive pedagogy in dance:

- Individualized teaching and learning
- Body, mind, and emotions are integrated in a holistic way
- Encourages agency, self-learning, learning to learn
- Knowledge gained through the body, embodied learning (holistic view on knowledge)
- To incorporate historical and cultural perspectives in the dance practices (to learn in, with, though, and about the arts)
- Aim is human development, not only performance goals
- Practices include improvisation, creative processes, reflective practice, inner awareness, use of anatomy, kinesiology, and physiology
- Emergent curriculum, dance curriculum based on movement principles, not specific technique, steps, repertoire.

  (Dragon, 2015)

### Teaching (45 studies)

## Teacher-centered vs student-centered teaching (18 studies)

Findings demonstrate that teaching dance has to a great extent been based on the traditionalistic view. In two studies of Norwegian dance students a dance culture underpins the docile body (Andresen, 2011; Nordgård & Haugland, 2014). This led to a reproduction of skills and delivery of choreographic material rather than individual explorations and individuation by enabling the student's ability to think, act, be creative and different from others (Andresen, 2011; Nordgård & Haugland, 2014). In another study of Norwegian bachelor students in classical ballet, the teachers were viewed as authority figures and gatekeepers, holding a lot of power (Haraldsen et al., 2020, 2021), which align with international findings (Green, 1999) of dance teachers wanting to be endlessly admired and worshipped (Keinanen, 2003). From the young dancers' perspective this seems to be interpreted as 'nothing is good enough', 'you're not allowed to make mistakes' and 'it's not perfect yet', alongside an evident behavior of constant searching for the teachers' conditional regard and approvement (Pickard, 2012).

Also, findings linked to traditionalism teaching reveal a preoccupation on developing technique over the process of engaging in style and choreographic material (Morris, 2003), where the teachers' role is delivery of performance goals. When dance is taught only as the replication of steps, as a closed system in which the ends are preset and the outcomes tightly controlled, the kind of inquiry, imaginative thinking, and discovery necessary for professional dance artist of the 21st are delayed (Rimmer, 2017; Østern, 2017).

Furthermore, the authoritarian pedagogical practice was found to be maintained through socialization, something actively promoted to students as a pedagogic ideal (Rowe & Xiong, 2020). Similarly, there seems to be a lack of awareness and focus of the 'how' of teaching, and studies have identified the existence of a lot of 'hidden curriculum' (Lakes, 2005; Østern & Irgens, 2018). Paradoxically, 'how' teaching and learning dance and choreographic processes are led and organized, seem to matter the most regarding the quality of student experiences (Østern & Irgens, 2018). When comparing experiences of dance teaching and choreographic processes, there seem to be more positive experiences from participating in choreographic processes than in dance technique classes (Haraldsen et al., 2020; Østern & Irgens, 2018). Negative associations were associated with experiences of colonization, brainwashing, being used, distrust, copying, limiting, hierarchical lines, disempowerment, fixating, and non-dialogical working methods (Østern & Irgens, 2018).

However, there is recent evidence of an ongoing shift towards a more student-centered and progressive teaching paradigm in current dance education. In the Western societies we can see these changes over a period of the last fifty years and probably most evident in the last decades (Dragon, 2015). These changes are evident both in the education of dancers as well as in the demands of dancers in the professional working field today (Andresen, 2015). In Norway, the shift is evident in the 2006 curriculum reform, documented by a shift of focus away from dance as only technique and performance towards dance as an academic discipline. In dance teaching, we have seen the shift in the way technical, creative, and reflective aspects of dance have been integrated (Andresen, 2015). Furthermore, the teaching based on this curriculum, are found to be highly student-centered (Larsen, 2015). Today, professional dancers are not just expected to be instruments for a choreographer. They are expected to take part in and contribute to the creative process, and many choreographers are interested in letting their dancers express themselves as individuals in the dance. This requires a more student-centered approach (Andresen, 2011). When students and dancers engage in such progressive practices, research findings document enhanced experiences of freedom, meaningfulness, non-hierarchical lines, mutual respect, transformative learning, personal development, listening, and collaboration (Nordgård & Haugland, 2014; Østern & Irgens, 2018.

Reflective practice is one important characterization of student-centered teaching. Teachers seem to incorporate a variety of methods to support their students' reflection processes. The teaching methods most often used were the following: a) teachers asking questions and providing feedback, b) peer-feedback activities, c) individual and group discussions, and d) viewing and analyzing video recordings of students' practices (Leijen et al., 2008). However, research shows that there are some challenges in applying reflective practice in its full sense in dance teaching (Leijen et al., 2008, 2009). Additionally, the type of reflection used so far the most is a reflection on how to apply technical concepts and principles. Whereas facilitating student reflections

on awareness of oneself and bodily possibilities, the role of own personality, identity, and cultural background in relation to practice seemed to be less used and were seen by some dance technique teachers as the responsibility of the students alone, something that had to be addressed outside of class (Leijen et al., 2008). In another study of dance teachers that explored the challenges they encountered with students in their pedagogical practice of reflection, findings identified the following obstacles: a) general difficulties (i.e., low reflective experience, lack of writing skills, dealing with personal stuff), b) difficulties describing an experience (i.e., observing skills, discrepancy between doing and awareness), c) difficulties evaluating an experience (i.e., waiting for the teacher to provide feedback, negative focus, lack of criteria for evaluation) and d) difficulties relating to multiple perspectives (i.e., self-centered, shyness, lack of independence). Additionally, it seemed difficult for students to question teachers' comments and authority and share their own ideas with classmates (Leijen et al., 2009).

### Practice-based pilot studies exploring progressive dance education

During the past 20 years, intervention studies and action research on dance practice *exploring how to apply a more progressive dance pedagogy in practice as well as investigating effects of these practices* have been published.

Table 22: Practice-based pilot studies within a new pedagogy

Reference	Main pilot focus	Main results	Population
Alterowitz, G. (2014). Toward a feminist ballet pedagogy: Teaching strategies for ballet technique classes in the twenty-first century. <i>Journal of Dance Education</i> , 14(1), 8-17.	Teaching ballet in a non-authoritarian manner, examining a pedagogical approach in which alternative teacher—student relationships are created and practiced. Strategies that encourage individual inquiry, self-discovery, and collaboration.	Greater comprehension comes from learning with both mind and body, enhanced engagement, and motivation.	Classical bal- let course in HE- setting
Andersen, H. (2018). Somatics, Transfer Theory, and Learning: Six Case Studies. Journal of Dance Education, 18(4), 164-175.	This mixed methods study investigates the juncture of dance science, somatics, and contemporary modern dance training, and how they intertwine with learning processes and skill execution through transfer theory focusing on the 'how' in the process and dancers' understanding of their own movement potential, enabling a reflexivity in their ability to adapt to different environments and movement vocabularies.	The results show dancers' participation in the eight-week somatic training workshop yielded growth in learning and skill execution in all participants. This growth was exhibited in overall skill improvement and partial skill improvement. A transfer of learning from knowledge into technical skills is best facilitated by seeing images, dialoguing, bringing awareness to movement through imagery, somatic training, and verbal cuing, giving and receiving feedback.	BA students at HE- dance education, age 18-25
Berg, T. (2017). Ballet as Somatic Practice: A Case Study Exploring the Integration of Somatic Practices in Ballet Pedagogy. <i>Journal of Dance Education</i> , 17(4), 147-157.	This case study highlights the teacher's unique teaching method called IMAGE TECH for dancers (ITD) and offers evidence to support ITD as a somatic approach to ballet pedagogy. This data illustrates the pedagogical innovation involved in the teacher's communication with her ballet students, which moves away from traditional authoritarian teaching practices to develop autonomous, creative, and empowered dancers.	The integration of somatic practices in ballet training has the potential to use the dancers' internal awareness of kinesthetic sensation as a tool. The teacher's kinesthetic advice accompanied the images used in ITD, fostering flexibility within the vocabulary to facilitate the adaptation of the concepts for individual dancers, subsequently shifting the authority from teacher to student.	One ballet teacher and a class of stu- dents at a post-second- ary institution offering a Bachelor of Fine Arts de- gree

Lin, Y. N., Hsia, L. H., Sung, M. Y., & Hwang, G. H. (2019). Effects of integrating mobile technology-assisted peer assessment into flipped learning on students' dance skills and self-efficacy. <i>Interactive Learning Environments</i> , 27(8), 995-1010.	In the present study, an approach which integrates mobile peer assessment into flipped learning is proposed. A 9-week experiment was conducted to explore the effects of the approach on students' dance skills, self-efficacy, and learning satisfaction	The results indicated that the students learning with the integrated mobile peer assessment and flipped learning approach had better dance skills than those learning with the conventional flipped learning approach and traditional instruction. In terms of self-efficacy and learning satisfaction, the students learning with the conventional flipped learning approach outperformed those learning with the traditional instruction. However, the flipped learning approach integrating mobile technology-assisted peer assessment did not significantly improve the students' self-confidence.	Undergradu- ate students from three general edu- cation dance classes, all be- ginners
Minton, S. C., & Hofmeister, J. (2010). The International Baccalaureate Dance Programme: Learning skills for life in the 21st century. <i>Journal of Dance Education</i> , 10(3), 67-76.	This study explores how a group of International Baccalaureate (IB) dance students constructed meaning from their dance experiences.	Similarities and connections were found between the themes identified from the IB Dance experiences, and the 21st-century skills of being accountable, flexible, socially responsible, communicative, creative, collaborative, self-directed, and a critical thinker who can reason, make choices, and solve problems.	IB Dance students
Petsilas, P., Leigh, J., Brown, N., & Blackburn, C. (2020). Creative and embodied methods to teach reflections and support students' learning. In <i>Dance, Professional Practice, and the Workplace</i> (pp. 47-66). Routledge.	We describe a project that introduced the use of creative methods for teaching reflection and reflective practice.	Findings showed that the dedicated reflective practice sessions were of value to the dance students, but the level of understanding of the relevance of structured reflective practice varied. In order to support reflective practice at every level, it needs to be an integrated part of the culture.	Students at Rambert School of dance
Rimmer, R. (2017). Negotiating the rules of engagement: exploring perceptions of dance technique learning through Bourdieu's concept of 'doxa'. Research in Dance Education, 18(3), 221-236.	Explored the use of enquiry-based learning approaches to teaching dance technique in higher education. Grounded in transformative and constructivist learning perspectives, such approaches attempted to develop students' reflective thinking skills, with a view to enabling them to become active agents of their learning in dance technique	Upon arriving at university, the students had formed pre-conceived 'doxic' understandings of dance technique, shaping their perceptions of how they were expected to behave in technique classes. Describing technique as being 'rigid' and 'set', the students appear to identify it as being distinct from other areas of dance education such as choreography and improvisation. the students appear to perceive each teacher to have their own 'style' of teaching, requiring them to enter classes with 'different head[s]. The students were not as challenged by the enquiry-based learning approaches as anticipated, and consequently the doxic understanding of dance technique largely remained intact.	HE- dance technique class
Ritchie, A., & Brooker, F. (2019). Democratic and Feminist Pedagogy in the Ballet Technique Class: Using a Somatic Imagery Tool to Support Learning and Teaching of Ballet in Higher Education.	Testing progressivism teaching and learning ballet technique through a somatic imaginary tool; using dialogue, discussion, and self-authorship.	Increased learning outcome, clarity in movement, increased fluency, increased student engagement and motivation	Classical ballet course in HE- setting

Journal of Dance Education, 1-8.			
Roche, J., & Huddy, A. (2015). Creative adaptations: integrating Feldenkrais principles in contemporary dance technique to facilitate the transition into tertiary dance education. Theatre, <i>Dance and Performance Training</i> , 6(2), 145-158.	A project that introduces somatic learning approaches, primarily from Feldenkrais Method and Hanna Somatics, focusing on 'creative autonomy' and including important processing skills: problem solving, critical thinking, collaboration, persistence, adaptability, and autonomy.	The students reported that they initially felt insecure, vulnerable, and intimidated due to not knowing each other. The process helped them to begin to know each other, which supported the transition into university. The sessions helped students to focus their attention on personal development rather than establishing a competitive working environment, and they became more reflective.	First year's student in HE- setting
Schupp, K. (2011). Informed decisions: Dance improvisation and responsible citizenship. <i>Journal of Dance Education</i> , 11(1), 22-29.	Examined a constructivist approach to integrating responsible citizenship and dance improvisation. Through participating in improvisational and sociopolitical tasks and comprehensive written reflection, students new to improvisation were better able to understand their choicemaking processes.	Their participation led to increased growth as improvisers, greater sociopolitical awareness, and a better understanding of how they make informed decisions. This article offers insightful and helpful information about pedagogy that advances artistry, advocacy, and selfawareness.	dance major classes in HE- setting
Seago, C. (2020). A study of the perception and use of attention in undergraduate dance training classes. <i>Research in Dance Education</i> , 21(3), 245-261.	A main aim of this research has been to develop strategies for encouraging agency in young dancers' through explore awareness of attentional choices in undergraduate dance students.	It was evident that students possessed only a limited awareness and had not previously considered the effect of different modes, targets, and qualities of attention. The intervention helped students to access different kinds of attention and they felt more able to cross-reference experiences and practices. Increased attentional awareness enabled progress in their dancing which enhanced their understanding and performance.	undergradu- ate HE- dance students (3 male/13 fe- male), identi- fying as white British, con- temporary dance
Spohn, C., & Spickard Prettyman, S. (2012). Moving is like making out: Developing female university dancers' ballet technique and expression through the use of metaphor. Research in Dance Education, 13(1), 47-65.	This qualitative study explored the use of metaphor within a somatic context as a means to bridge the divide between technique and expression. Imagery is a common teaching tool employed by dance instructors and somatic practitioners to help students learn skills, to promote creativity, and to develop dance students' technique, artistry, and overall performance. Metaphors have the potential to engage dance students in active learning since students must interpret the metaphor and then respond with physical action	Findings indicate that the use of metaphors helped female students simultaneously realize their expressive and technical potentials through associations with meaningful personal experiences. Ballet technique became less about the labor involved and more about creating opportunities to experience pleasure in movement. Ultimately, students were able to formulate their own metaphors and used their imagination to establish personal connections to movement. These findings suggest the power of metaphor, and broader somatic approaches, as tools for ballet educators to help students transcend the dualism between technique and expression.	Undergradu- ate advanced intermediate ballet classes
Weber, R. (2009). Integrating semi-structured somatic practices and contemporary dance technique training. <i>Journal of Dance &amp; Somatic Practices</i> , 1(2), 237-254.	The research, consisted of a series of somatically informed contemporary dance technique classes in order to allow students more tools from which to build a healthy, embodied practice. Working within either of these frameworks, practitioners rely on the autonomy of clients/students to realign and re-pattern	Results of the study included students' displaying enhanced bodily connection, creativity, confidence, and critical understanding of tenets underlying somatic work, as well as some implications for dance technique. Students became more aware and embodied; felt empowered	a first-year college dance programme, US

through somatic awareness of what feels pleasurable or 'good'.

and enjoyed a greater sense of well-being throughout their dancing; appreciated tools for movement initiation; exhibited new variety in movement quality and patterns; and discovered greater creativity and autonomy within their dance practice.

### Teaching style, teacher characteristics, leadership style (18 studies)

A group of studies investigated different teaching styles. Two studies with reference to Chelladurai's Multidimensional Model of Leadership was identified (it measures leader behaviors in five dimensions: Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support and Positive Feedback). The first, (Van Rossum, 2004) revealed that while the characteristics of the ideal teacher were very similar for both teachers and students, large differences appeared in the rating of daily class activities. In the second study, Rafferty & Wyon (2006) discrepancies were found between teachers' and students' perceptions as well as differences between students' perceptions in Training and Instruction, Democratic Behavior, Autocratic Behavior and Positive Feedback, but not in Social Support. Both dance students and dance teachers considered training, instruction and positive feedback the most important dimensions of the ideal dance teacher pitched toward future profession (crossed by more than 68% of the students and 90% of the teachers). To these, one should add the following qualifications: supportive, interest in student as a person, positive, motivating, geared toward pleasure in dancing, passionate, and very critical. Structured was chosen by 95% of the teachers and by 60% of the students (Van Rossum, 2004). Students wished that their teachers would be higher on training and instruction, democratic behavior, and positive feedback (the highest wish score) and lower on autocratic (controlling) behavior than the teachers delivered. There were no significant main effects for gender or dance style (Rafferty & Wyon, 2006). Teachers appeared to present a more positive sketch of their characteristic behavior than students did in both studies (Rafferty & Wyon,

2006; Van Rossum, 2004). Furthermore, ambivalent support was found for the image of the authoritarian, strict dance teacher in the Van Rossum study in line with a recent Norwegian study, set in a high-performance talentdevelopment program. However, clearly signs of controlling conditions and authoritarian teaching style with partial and unfair behavior were evident together with signs of close relationships, care and support (Haraldsen et al., 2020; 2021). In another international study, there was no evidence found of differential treatment of the students by the teacher (Bibik, 1993). According to both teachers and students, the ideal teacher favors democratic behavior in line with the student- centered and progressivism way (Van Rossum, 2004).

Another study investigated the use of the Command Teaching Style (TS) compared to the Problem-Solving TS (Cuellar-Moreno & Caballero-Juliá, 2019) and found that the Problem-Solving TS is preferred by most students (76.47%). Qualitative analysis of the interviews demonstrated that students preferred the Problem-Solving TS because it gave them greater freedom to work at their own pace, contributing to the development of creativity, cooperative work and vitality. In the case of the Command TS, students who preferred this TS indicated that a lack of practice and confidence were the reasons behind their choice (Cuellar-Moreno & Caballero-Juliá, 2019).

In relation to typical identified general teacher characteristics, the findings demonstrate the teacher behavior (i.e., the desire to teach, teaching focus, how to challenge students, instructional methods, and assessment strategies) vary and are positioned within and across both the two main pedagogical paradigms (Haraldsen et al., 2020, 2021; Minton & McGill, 1998; Sims & Erwin, 2012). The dance

teachers struggle to interconnect the world of art, the world of education, and the world of arts education (Andrzejewski, 2008). Most time is spent on planning classes (41%) and monitoring (18%), while only 1% was spent on behavior management. Also, time spent on response performance feedback (11%), presentation (9%), organization (8%) motivation feedback (2%), beginning/ending class (2%), are low. The teachers whose students showed a significant improvement in their performance test spend more time on giving performance feedback, motivational feedback, beginning/ending class, and in behavior management than other teachers (Minton & McGill, 1998).

Regarding the enhancement of student learning and motivation, a review study (Chua, 2017) identified four main important evidence-based teacher characteristics:

(1) have deep content knowledge (Aujla, Nor-

- din-Bates, and Redding 2014; Cairns 2010; Chua 2015a; Garces-Bacsal, Cohen, and Tan 2011; van Rossum 2004).
- (2) give affective support and positive, explicit feedback (Aujla, Nordin-Bates, and Redding 2014; Chua 2015a; Garces-Bacsal, Cohen, and Tan 2011; Pickard and Bailey 2009).
- (3) influence students' mindset that their dance abilities are not entirely innate but changeable (Chua 2015a).
- (4) set high expectations and challenging activities for students (Cairns 2010; Garces-Bacsal, Cohen, and Tan 2011; Oreck, Baum, and McCartney 2000).

### Learning climate & motivational climate (6 studies)

Several Studies highlight that the interaction between conditions (where you are) and personal factors (who you are) have shown to affect performer's motivation and psychological functioning (Haraldsen et al., 2020; Hancox, 2014; Aujla et al., 2014, 2015; Quested & Duda, 2009). Those motivational experiences are multifaceted with autonomous motivation being more psychologically robust and less dependent on given conditions (Haraldsen et al.,

2020). The latter is nurtured in a task or mastery-oriented climate, where effort and personal as well as collective improvement is rewarded, cooperative learning is encouraged, the contributions of every dancer are acknowledged and mistakes are responded to with informational feedback instead of punishment both verbally and physically (Quested & Duda, 2009; Aujla et al., 2014; Hancox et al., 2017).

Findings showed that dance teachers supported mastery goals more than performance/ego goals. However, when comparing leisure and talent contexts, the talent center motivational climates were perceived as more task-involving and less ego-involving than local leisure climates (Nordin-Bates et al., 2012), in contrast to the findings from Norwegian context (Haraldsen, 2019). Mastery-climate seems to be facilitated through four teaching approaches; (1) enhancing understanding (through scaffolding, emphasizing key concepts, press, and proactive instruction), (2) supporting learning and motivation (encouraging help-seeking, showing enthusiasm, incorporating popular media, establishing the relevance of class content, and self-disclosing), (3) enhance a god teacher-student relationship (showing interest in students, autonomy support, discretion and using humor), and (4) by supporting classroom management (monitoring and pacing, responding to help-seeking, varying the participation structure in the class, and moving around the room to establish closeness to all of the students). In order to facilitate flow experience (i.e. performing in a feeling of energized focus, full involvement, and enjoyment) a qualitative study identified that supportive, secure, and open learning environments (e.g., nonjudgmental, creative, and open goals) were important flow-enhancing factors, whereas controlling conditions seem to hamper or reduce flow experiences, intrinsic motivation, and development of artistic competence (Hefferon & Ollis, 2006).

In a recent Norwegian doctoral thesis of talent development schools in classical ballet (based on the framework of self-determination theory) the findings revealed a typical high-performance culture where controlling conditions turned out to be quite common (Haraldsen, 2019). The control appeared to be more directly interwoven in rigid structures and routines (i.e., traditionalist way of teaching, the 'doxic' culture of dance), than in the interrelationship between the teacher and the students. However, autonomous motivation was also facilitated through the Norwegian egalitarian over-arching culture, by close relationships, by being partly student-centered, and through focusing on artistic dimensions and processes (Haraldsen et al., 2020).

# The interrelationship between teachers and students, ethics, and power relations (10 studies)

There are a few studies investigating the teacher-student (or choreographer-dancer) relationship in the context of western theatre dance. In a recent action research study, the value of 'touching' when teaching in a ballet studio-based class was explored (Assandri, 2019). Findings showed that 'touching' was widely accepted and desired if clear parameters were explained and understood by both teachers and students. Specifically, touching should be short, occasional, and accompanied with appropriate explanations (Assandri, 2019). In a sociological perspective linked to Bourdieus' concept of 'doxa' (i.e. the things that are taken for granted and been implicit socialized; Rimmer, 2017), findings show that the traditional authoritarian structure and formality of the dance technique are not easily changed. (Rimmer, 2017). This was also confirmed in a longitudinal and ethnographic study based on the experiences of 12 young ballet dancers tracked over a period of four years during the process of 'becoming' a ballet dancer (Pickard, 2012). The results revealed that the teachers, as having symbolic power, used their power against the young dancers, in the form of approving or disapproving (Pickard, 2012). The same tendencies were also found in Haraldsen's (2019) doctoral thesis from Norwegian classical ballet context, where discrimination by teachers, based on students' competence, motivation and/or obedience was reported by all interviewed dance students (Haraldsen et al., 2020, 2021). Finally, an American study that investigated dance teachers' beliefs (and use of) criticalthinking activities with high-advantage (able, knowledgeable, motivated) versus low-advantage learners, established an 'advantage effect' (Warburton, 2010). High-advantage learners thus received enriched instruction that resulted in high-level performance that in turn made more enriched lessons more likely.

Hence, there exists evidence to claim that the relationships between dancers and teachers (or choreographers) are often defined by a particular hierarchy in which the teachers or choreographers hold more power than dancers. However, these power dynamics have been challenged since the 1960s through the emphasis on more emancipatory artistic and pedagogical practices. Yet, dance artists still negotiate positions of power and control (Duffy & Beauty, 2019). In a study of power dynamics between dancers and choreographers, from the choreographers' point of view on the collaborative values and experiences with the dancers, the findings are more nuanced and positive. A commonly held downside is that it often takes more time to collaborate, especially with dancers who may not be open to or experienced with it (Duffy & Beauty, 2019).

There are also two studies set in the Norwegian dance education context (Hellem, 2017; Rothmund, 2019), that contribute to this matter in the recent Norwegian context in addition to the doctoral thesis of Haraldsen et al (2019). Findings from the study of upper secondary dance school (MDD), showed that relatedness was an essential part of the teaching, and the dance teachers invested in a close, supportive, positive, and student-centered relationship with their students. The dance teachers seemed both aware and cognizant of the ethical dilemmas in the power unbalance and the risk in having a too close and personal relationship with their students and they mainly demonstrate use of this power in a professional, ethically sound and positive manner (Hellem, 2017). In the Rothmund (2019) study, the inter-relationship was studied over a three-year period in a contemporary dance bachelor program, showing that the students view of the teacher's role and the relationship were changing and evolving

over the three-year period, in parallel with the students own learning and development process and their transformation towards increased independence, agency and autonomy (Rothmund, 2019).

### Communication (3 studies)

Communication in dance, which is a highly bodily practice, has not been a popular topic for research. In a study that examined how dance teachers expressed themselves verbally in teaching situations, the findings demonstrated that insights regarding the expressive values of movement were communicated verbally to a certain extent, but in a very vague manner and in a way that was difficult for outsiders to interpret (Englund & Sandstrom, 2015). Nonetheless the teachers assumed that the students understood. In another study, exploring instructor feedback, it was found that students were treated differentially based on which dance genre they participated in, linked to the teachers' attitudes and beliefs towards the genres. Students in the jazz class received less instructive feedback than students in the modern dance class (Bibik, 2006). Finally, in a systematic review of the literature from the embodied cognition theory, focusing on the dancers' perspectives (Ribeiro & Fonseca, 2011), communication styles during dance improvisation were investigated. Findings indicated that when dancing, dancers share subjective experiences that are filled by their senses, memories, expectations, states, body condition, personal history, space, and time. It was suggested that dance improvisation is characterized by the interaction and communication between bodies and the environment, as well as supported by affective and cognitive systems (Ribeiro & Fonseca, 2011).

### Curriculum (2 studies)

The scoping review identified only two master theses, focusing on curriculum matters, both from Norwegian dance programs in upper secondary school (MDD). Results documented that the Norwegian curriculum in dance (MDD) are a mix of traditionalism and progressivism focusing on developing both the practice of dance technique, as well as improvisation, creative movement work and reflection

linked to dance and movement in all dance-related subjects (Andresen, 2015). The aim of the Norwegian dance programs' curriculum is found to be holistic, integrating the whole person in dance (not just the physical aspect). It's designed to stimulate the students' individuality and encourage them to question and reflect upon their own dance practice. Thus, dance as a subject has moved away from its position as merely a subject of physical education and gained status as a subject of the arts (Andresen, 2011). In the other master thesis (Larsen, 2015), which explored how the concept of knowledge and competence in the curriculum were understood and practiced in the teaching, it showed a teaching practice applying a holistic view on knowledge and learning that integrated intellectual, cognitive, physiological, aesthetic, creative, and ethical perspectives (Larsen, 2015).

### Assessment (3 studies)

Three studies focused on assessment in teaching and learning, revealing that this is an area that need to be both further developed and studied. A study from higher-education context, revealed that aside from the student conferences on the faculty, most of the assessment strategies were based on teacher interpretation, and the majority of the students' grades were determined by attendance, participation, and attitude (Sims & Erwin, 2012). In another study, teacher's conceptions of quality in relation to summative assessments of dance knowledge in a Swedish upper secondary school, was explored (Andersson, 2016). The findings demonstrated that there were no regulations on how teachers should communicate the grades nor on the basis on which grading was performed. However, there was a common practice with grade conferences and conversations between teacher and student around the student's achievement on a specific course. In addition, the study identified that conceptions of quality were expressed through two pathways. Namely, the teacher's focus on abilities linked to dance specific technique and syllabus, genre specific movement principles, and general abilities like effort, motivation, reflections and also through views of dance knowledge progression. Additionally, the assessment by the

teacher was depended on his or her own experiences or lack of experiences based on background, education, dance tradition and context (Andersson, 2016). Finally, in an effect study that examined the effect of criteria-referenced vs. implicit formative assessment on achievement in the arts, results showed that, overall, criteria-referenced formative assessment had a statistically significant, positive, but small effect (d = .26) on students' dance achievement (Chen et al., 2017).

### Theory vs. practice - linking dance science and dance teaching (3 studies)

Anecdotal evidence from participants in several studies suggest that ballet pedagogy has not evolved at the same rate as changes in the other artforms despite a rapid development within dance science, nor has it reflected the increasingly socially aware society in which it exists in (Lindblom, 2020). One explanation might be the way the educational system is organized. Dance education programs that are placed at a university, and especially those that have close collaboration with the dance science environment (i.e., dance medicine, physiology, psychology and pedagogy), as in the UK, have shown the best results and have the most satisfied students (Tsompanaki & Benn, 2011; Østern, 2017). In a comparative study of the UK & Greece with different organizational levels of dance education<sup>15</sup>,results showed that the UK model contributed the following – a)more critical thinkers to the world of professional dance, b) a stimulated breadth and depth of original research from practitioners, c) educated, skilled dancers to becoming better informed artists in education and community contexts, and d) the pioneering of a higher education study model which has been very successful (Tsompanaki & Benn, 2011). Further, UK students' responses indicated this model was attractive since, a) created many possibilities across technical and theoretical elements, b) teachers respected students' individuality, and c) encouraged and challenged them to find their own artistry. Students admitted this approach created a non-competitive atmosphere. Conversely,

Greek students were not satisfied with the breadth of modules offered to them, and many wished for change, but the teachers didn't have much motivation to become agents of such a change. This directly affected students' learning experiences (Tsompanaki & Benn, 2011). Same tendencies are identified in a Norwegian study (Østern, 2017), which found discrepancies between different organized higher education dance programs. Findings revealed that dance programs based more on traditional conservatoire models did not offer enough time and space to the students to develop own agency, reflection, and own artistic voice (Østern, 2017). Experience with dance science and research were also sparce - only students taking a dance program at a traditional University had proper experience with research, and they reported this to be positive (Østern, 2017).

### Teaching career perspectives (1 study)

Only one study has explored the experiences of dance teachers' career perspectives (Duffy, 2020). Teachers employed at higher education dance faculties seemed to negotiate their aging bodies in a variety of ways and faced distinct challenges. 39% of the participants confirmed they experienced physical requirements difficulty, and 19% reported no difficulty. The difficulties they experienced were regarding diminished strength and flexibility, with injuries and surgical procedures were often cited. Also evident were challenges with emotional and mental processes as the teachers moved through dance teaching careers, in addition to issues of job security and identity. (Duffy, 2020). Interestingly, mid-career dance teachers seemed to experience more physical and emotional pain than their senior counterparts, even though their bodies were younger. Teaching demonstrations had been affected by the aging process, from showing to indicating. The following negotiation strategies were identified: a) various modes of strengthening, stretching, and cross-training, b) resting, c) approaching teaching differently, d) adapting workload requirements, e) adjusting the goals of technique class and choreography, and e)

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<sup>&</sup>lt;sup>15</sup> UK (Universities) BA, MA, teacher certification), Greece (vocational institutions, not a HE- degree).

taking advantage of differing therapies (Duffy, 2020).

### Learning (28 studies)

### Competencies & knowledge production in dance (3 studies)

Only three studies have explicitly examined perceptions of competencies and knowledge production in dance. One study examined how higher education dance students in a first-year jazz and modern dance class constructed their self-perceptions of dance competence. A perceived competence in dance scale was administered to the students. The findings showed that 57.7% of the students' competence perceptions were congruent with the teacher's, whereas 42.3% were incongruent (15.3% higher, 27% lower). Based on interviews, these groups displayed distinct characteristics regarding attribution for success, interpretation of feedback, and focus on classroom activities. Rather than the teachers, the students' self-perceptions and attribution patterns in the learning context accounted for their self-perceptions of competence (Bibik, 1993). In another study (Risner, 2000) in exploring the construction of knowledge by dancers in the rehearsal process, identified four significant ways of knowing: 1) knowing as an 'interpersonal construction' highlighted the collaborative nature of dance, 2) knowing 'by doing' focused on the know-how to dance, something that was embodied and situated. For the dancers it was impossible to know the dance without being able to do it. 3) knowing 'as memory' focused on the body's ability to know and remember, and to put back together or to re-assemble the body. To remember was to re-organize the body specifically for the dance at hand containing propositional and practical knowledge that re-integrated the mind and the body. Finally, 4) knowing 'as certainty' was realising that to some degree knowing was associated with a confidence derived from being sure of oneself in rehearsal and performance situations. To be unsure, it seemed, was equivalent to not know. Each of these thematic clusters overlapped one another and represented different layers of knowledge production in dance (Risner, 2000).

A recent doctoral thesis from Norwegian higher education in contemporary dance examined the perception of dance technique and dance material in the students (Rothmund, 2019). Technique may be understood as a specific codified given system (i.e., traditionalism) or more as a generic practical negotiated skill (i.e., progressivism). The findings revealed that the students, instead of being positioned passively either in one of the poles, negotiated in-between the two paradigms, and experienced that the one did not have to exclude the other. The negotiation process was experienced as useful in the learning process, since it forced the student into an active situation of agency in their own learning, dealing with the different experiences of being socialized into a given tradition creating an independent personal artistic identity and way of expression (Rothmund, 2019).

### Learning experiences within traditionalism way (learning outside-in; 8 studies)

In line with the teacher centered way and traditionalism, several studies report evidence of 'the old way' of apprenticeship learning, based on imitation, discipline, and control where students are expecting to be taught as their teachers were taught, and where teachers demonstrate and the students do, and then the students receive (critical) feedback (Dragon, 2015; Haraldsen et al., 2019, 2020, 2021). Moreover, the students take on a passive role and are usually expected to follow or obey the teacher without questioning methods or practices (Dragon, 2015; Green, 1999). In another study comparing students within a progressive way of teaching with students within more traditional classes, findings revealed that the students in creative dance class made significant improvements in creative and critical thinking, but those in the more traditional dance class did not make significant gains in these two areas (Minton & McGill, 1998).

The traditionalism way of teaching and learning are also closely connected to control and discipline. Student responses in this way of teaching and learning resonated with reference to a body ideal that disconnects from a

sense of an inner authority and echoes Foucault's notion of discipline and structural control of the body through self and others' surveillance (Andresen, 2011, Greene, 1999). Over time, with the teacher's eye constantly on students, the students learn to discipline themselves through self-regulation and unconscious habit (Haraldsen, 2020, 2021; Green, 1999). This is also echoed in a Norwegian study of perceptions of discipline in upper secondary dance education (Dolva, 2012), which concluded that discipline is understood in relation to self-discipline and the ability to achieve performance goals. Self-discipline is an important goal in all dance genres (i.e., ballet, jazz, and contemporary), however discipline is most visible in the ballet classes (Dolva, 2012). Self-discipline reflects internalization, which is the process where the students take over the values and attitudes of the dance subculture and make them as one's own so that socially acceptable behavior does not have to be motivated by expectation of external consequences but instead by intrinsic or internal factors (Dolva, 2012). The same tendencies were evident in a recent Norwegian study of students attending a bachelor program in classical ballet, where findings showed high levels of introjected motivation (i.e., driven by an internalized pressuring voice of guilt, shame, or obligation) nurtured by a controlling and performance-oriented teaching style; Haraldsen et al., 2019, 2020, 2021). Finally, also in a Norwegian study of MDD students, some of the same tendencies were found (Andresen, 2011). The students clearly expressed how they were confused about both being their bodies and at the same time trying to objectify, control, and distance themselves from their bodies. The study shed light on how the students strived to live up to an ideal of normality, or perhaps perfection, and how they were being self-punished through feelings of shame for not living up to the expected ideal or failed in self-control and selfdiscipline (Andresen, 2011). The study concluded there was evidence of dancers that were controlled and shaped both regarding their physical bodies and their sense of identity through the discipline and foundations of dance education, with reference to Foucault's' theoretical framework (Andresen, 2011).

# Learning experiences within progressivism way (learning inside-out) (22 studies)

As documented in the range of intervention and action research studies exploring ways of implementing the new way of dance education, the progressivism way (see details at page xx), there are promising results for this shift in dance education. The new way pedagogy is affecting the process of learning from three perspectives linked to theory and research: embodied, transformative and reflective learning.

The concept of embodied learning has, in the literature, been connected to the evolution of contemporary dance techniques as well as the introduction of somatic practices into dance training and dance education (Petsilas et al., 2020; Østern, 2017)). There is an implicit notion of the knowing existing within the doing, and therefore embodied practice is at the core, as ways of experiencing, being, participating, understanding, and communicating as a body (Andersen, 2011). The experience of being present in the dance practice, to not think, is connected to autotelic flow-experiences, a state where body and mind melt together as one, without an external focus, a state associated with enhanced intrinsic motivation and wellbeing (Rothmund, 2019). In the doctoral work of Rothmund (2019), five themes of embodied learning describing the process of reaching this state of flow was identified: 1) to listen to your body, 2) to verbalize bodily experiences, 3) to adjust movements to your own body, 4) to integrate body and mind, and 5) to identify your embodied knowledge. The embodied dimension of learning dance was also evident in a study exploring the intersection of the individual's imagery ability, imagery use in dance training and performance, and learning style. The findings demonstrated that most dance students showed relative ease when imaging. 79% of the participants reported a preference for "feeling" over "thinking" when gathering information for learning. The researchers concluded that imagery may be a good pedagogic tactic for reaching the embodied character of dance learners (Bolles & Chatfield, 2009).

Dance scholars and practitioners highlight that the language of movement and the verbal language should not be muddled (Andresen, 2011). Both dance and verbal language are considered cultural forms of representation. They are actions with the potential to produce, express and communicate meaning. The movement may be called text, the choreographer a writer, the dancer a performer and the audience readers. However, it is important for dance students to try to learn ways of verbalizing their physical experiences to communicate and document bodily experiences or embodied knowledge (Andresen, 2011). This is emphasized in many studies - that despite the embodied way of learning, it is vital in the learning process of dance to connect the body and mind (Andresen, 201; Nordgård & Haugland, 2014; Leijen et al 2008, 2009, 2012, 2016; Rothmund, 2019). Reflections involve questioning existing assumptions, values and perspectives that underlie people's actions, decisions, and judgements. The purpose of questioning is to liberate people from their habitual ways of thinking or acting. The abovementioned practice-based studies have explored ways of verbalizing their physical experiences to communicate and document bodily experiences or embodied knowledge. In one study the dedicated reflective practice sessions was found to be of great value to the dance students (Petsilas et al., 2020). Specifically, reflective practice was identified as a process that had a positive impact on both personal growth and dance practice of the individual student, as well as, through collective and collaborative sharing of experiences, on the development of the group as a self-efficient ensemble (Petsilas et al., 2020). However, the level of understanding of the relevance of structured reflective practice varied, and the engagement with theoretical frameworks represented a challenge to some students. It seemed that the most beneficial discussions were when the large class cohort was divided into two or three smaller groups (Petsilas et al., 2020). In a study exploring reflective practice in ballet and choreography students, results showed that 79% of the students' reflections focused on technical aspects, and the remaining 21% focused on practical aspects, mainly concerned with the

execution of technique (Leijen et al., 2012). The majority of choreography students' reflections (65%) focused on practical aspects of their choreography and how their choreographic intentions were communicated with the composition. Whereas 22% of the choreography students' reflections focused on the technical aspects of their compositions, and the remaining 13% reflections were characterized as sensitizing reflection. Furthermore, this study revealed that the quality of reflection in peer-feedback was on a higher level than the quality of reflection in self-evaluations (Leijen et al., 2012). Regarding the level of reflection related to learning, choreography students' reflections were on a higher level compared to ballet students, since more often, students presented justifications and critique than discussion and descriptive information (Leijen et al., 2012). In another and more recent study of how to facilitate reflective learning in university dance students (Leijen et al., 2016), researchers found guided reflection was more effective as it enhanced the dialog and a transformative level of learning, while unguided reflection produced only a descriptive level of learning (Leijen et al., 2016). In a Norwegian study, exploring ways of developing a conscious attitude and agency towards movement as expression in dance education, findings showed increased awareness of communicational codes. Several of the dance students also revealed new aspects of dance as an art form through the process of verbal reflection (Andresen, 2011).

Transformative learning is the process of deep, constructive, and meaningful learning that goes beyond simple knowledge acquisition and through a process of becoming critically aware of tacit assumptions (see Mezirov, 2000). In dance education transformative learning is part of the progressive 'new way' of teaching and learning and focuses on facilitating experiences that challenge the students' tacit, taken-for-granted assumptions, beliefs, values, and expectations (Rimmer, 2017). In a study of first year higher education dance students exploring the effects of transformative learning, the findings revealed some challenges since this new way differed greatly

to the students prior learning in dance technique. Altering one's perception of the teacher as the provider of technical dance knowledge to that of a facilitator of individual knowledge turned out to be a too radical shift for some students (Rimmer, 2017). Consequently, the doxic understanding of dance technique largely remained intact despite the intervention. As a conclusion, the author claimed that the teacher or student alone cannot change the culture of the dance technique class (Rimmer, 2017). However, in a Norwegian study of contemporary dance students in higher education, evidence of the process of the transformative was present (Rothmund, 2019). In this study there was evidence the students did go through a transformative process of learning that gradually shifted from a traditional teacher and subject centered way, to a progressive, holistic, and self-regulated way (i.e., from identify and reproduce [first year], via explore and transfer [second year], to personalize and develop [third year]). Agency was identified an important key of success in the transformative process (Rothmund, 2019).

# Social support and inter-relations with peers (3 studies)

There are few studies addressing the role of peers in teaching and learning dance within the sub-culture of classical ballet. In one study (Pickard, 2012), claimed that if a dancer is in the game of ballet, then mastery of the game depends on their social and cultural capital and in turn their position in the internal hierarchy. Playing the game means accepting that power struggles within the peer group exist in the form of rivalry, envy, and competitiveness and in the potentially obstructing effect of a 'pecking order' within the ballet class (Pickard, 2012). This was also echoed in a more recent study of Norwegian ballet students (Haraldsen et al., 2010, 2021), which identified that being among the best was the most important currency to possess as a ballet dancer student. It could be exchanged with social status among peers (i.e., respect, friends, status; Haraldsen et al., 2020, 2021).

# Transitions into and out from HE dance education (2 studies)

Only two studies have investigated the transition in (Rimmer, 2017) and out of (Higdon & Stevens, 2017) higher dance education. In regarding the entry of higher education institutions in dance, it is important to acknowledge that some students found their overall experience of dance at university at challenging, something that demanded a lot more of the students than their experiences with dance education prior to university. Moreover, after the new experience at university level the general consensus amongst the students noted that they considered dance as an art form in a broader perspective. This even resulted in a process of transformative learning where they questioned and altered the way they would define the term 'dance' based on their new knowledge (Rimmer, 2017). In the study of the transition process between higher education in dance and the dance profession, the understanding of employability and views about dance futures were explored (Higdon & Stevens, 2017). Findings indicated that a key theme explicit in the data was that of *journeying*. Students referred to metaphors that related to journeys, travel, routes, roads and paths. In the beginning stage of the journey of getting to a university and in the liminal space of the first year, students focused solely on their dance experiences. By the final year, students perceived their dance futures as diverse journeys of continuous development. The journey out of university for final year students was powered by agency consisting of a passion for dance, self-reliance and continuous learning. The participants revealed an active determination to forge a future dance career whilst they recognized the obstacles; financial, emotional and physical (Higdon & Stevens, 2017).

#### Being (34 studies)

#### Consequences on identity

Findings highlight how the field of dance is culturally embedded through an ongoing socialization process (Aalten, 2005; Alterowitz, 2014; Haraldsen et al., 2020). Our identities are shaped by the cultures in which we live,

which often has master narratives of 'ideal identities' (Green, 1999; Haraldsen et al., 2021). Traditionally, students assimilate the system of values from the teacher's unchallenged authority (Alterowitz, 2014). Hence, the dance identity seems to be related to Foucault's concept of 'the docile body', which are bodies that are habituated and regulated. In several studies Green (1999, 2000, 2003) has identified that dance participants continuously referred to the existence of mirrors, as a worrying and powerful presence that related to physical self-evaluation, behavior regulation, body objectification, and competition. Embedded in a system of surveillance, supervision, training and correction, the 'machine' body producing efficiency was enhanced (Alterowitz, 2014, Green, 1999, 2000, 2003)., Additionally, this embodied identity was further externally stressed by ideal body values in the society (thin, fit, healthy, young; Harrington, 2020). This is also related to the term 'the consumer dance identity', which reflects dance, television dance as SYTYCD and dance in social media (Harrington, 2020). In these contexts, research has identified the important role of the gaze - the external objectification of the body and the dancer. In these contexts, there is evidence of pressures to project a 'successful' self on social media, which underpins a culture of narcissism, contingent and vulnerable self-worth. Also, a heterosexual stereotype and sexism identity reigns within these environments (Harrington, 2020).

Traditionally, excellence has been conceptualized in terms of normative performance outcomes - this typically being a top international soloist performer. The "performance narrative" is common and promotes the storyline of preferred identities (i.e., the 24/7 elite performer), expected behaviors (i.e., dedication, passion, and mental toughness), and assumed developmental trajectories (i.e., a linear road to success). In a Norwegian study, knowledge on how the negotiation process that takes part within those narratives has become a "master narrative" (i.e., culturally dominant and widely told and retold). For example, "the performance narrative", might influence, override, and silence alternative stories are

discovered (Haraldsen et al., 2021). Findings demonstrated that the performance narrative" was echoed in the way the junior elite performers described their ideal identity, their "dreams," and the road map to what constituted "success". As a paradox, the results revealed the limited perception of "success" as being a top dancer reduced the participants' perceptions of their own success. Yet, implicitly, the talented dance students told of several indicators of success, which contributed to outbalancing the scale. For instance, there was a "social narrative" of belonging and being part of an in-group of like-minded peers and teachers that shared the same goals, interests, experiences, and identity categories. Furthermore, results showed a "flow narrative," of deep and internally driven involvement, learning, growth, and meaningful selfrealization. Lastly, a "lifestyle narrative," reflected in a way of living that is healthy and linked to good values and fosters advantages in life, was apparent. Altogether, these alternative narratives, which were told as parallel side stories by the dance students, represented potential narrative resources on which to draw for future dance education and profession (Haraldsen et al., 2021).

Results showed that the dance identity is not only embodied, but it also seems to be gendered (Green, 1999; Harrington, 2020). Men act, women appear- the objectification of women is clearly emphasized (Green, 1999; Haraldsen et al., 2020; Harrington, 2020). Diverse gender roles, where girls are expected to be passive, obediently accepting the instructions of the dance teacher, whereas boys are encouraged to be challenging, energetic and daring (Fitz, 1999; Green, 1999, 2000, 2003; Clegg et al., 2017). Stereotypical constructions of male dancers have also been evident, as being feminine and, by association, homosexual, which findings showed were considered the primary barriers to boys' engagement with dancing, particularly ballet, and led to bullying outside of dance (ibid). Moreover, young adult males reported experiencing homophobic stereotypes, narrow definitions of masculinity, heterosexist justifications for male participation, the absence of positive

male role models (straight and gay), and internalized homophobia. In reference to female dancers, seven themes of discrimination were identified: 1) double standard, 2) infantilization, 3) body image, 4) men into administration, 5) ballet as a career, 6) female choreographers and 7) resistance (Fitz, 1999). Suggestions of a more responsive pedagogical path for confronting homophobic attitudes and social stigmatization are needed (Clegg et al., 2017; Fitz, 1999). In the case of recruitment of more male dance students, findings demonstrate that the social context for dancing boys is a key factor in sustaining their engagement with dance. The attitudes by significant adults emerged as salient. Also, the lack of male peer support for boys, who often found themselves isolated in the dance studio, was a challenge (Clegg et al., 2017, 2019). However, a number of strategies for engaging and retaining boys in dance, such as privileging boys within the dance studio and improving opportunities to dance in schools are recognized (Clegg et al., 2017, 2019).

Altogether, the dance identity is both a process of construction where it seems to be equated to the naturalistic view of the body as a machine, the socialized docile body, and the body as an objectified product in the performance industry (Green, 1999, 2000, 2003; Harrington, 2020; Pickard, 2012). Hence, there is evidence of a dance body that thrives on uniformity, the visual, and obedience. As a result, these bodies may be likely to be injured and damaged, and to be preoccupied with weight and self-surveillance (Green, 1999, 2000, 2003; Harrington, 2020; Pickard, 2012). Dance educators have an important role in influencing attitudes and values within dance education and being more aware of how they encourage the dance identity (i.e., body ideals, gender stereotypes, elite characterizations). The above scholars have highlighted the need for a model of pedagogy that is gender neutral, fosters creativity and empowers all participants (Clegg et al., 2017; Green, 1999, 2000, 2003; Haraldsen et al., 2021; Harrington, 2020; Pickard, 2012).

## Consequences in relation to health and wellbeing

### The traditionalism paradigm

On the positive side, findings demonstrate that the world of dance might offer a rich social life and network within, nurturing close relationships, competence development and artistic thriving (Aalten, 2005; Demerlius, 2003; Haraldsen et al., 2020). Also, being involved in artistic processes might represent a meaningful way of living, which offers an extra dimension in life (Haraldsen et al., 2020). Furthermore, involvement in artistic processes was also identified as a gateway to flow - nurturing intrinsic motivation and life satisfaction (Haraldsen et al., 2020). However, on the other hand, a range of negative consequences are identified. As ballet culture has been aligned with the metaphor of "living in a convent", the dancers report impeding agency and operating in conflict with own true self (Aalten, 2005; Haraldsen et al., 2020, 2021). Dancers want to have a choice, they miss care and support, and the unequal power relations between dancers on the one hand and artistic directors, teachers and other 'gatekeepers' on the other, seem to condemn the dancers to a life of immaturity and availability, of feeling oppressed and controlled (Aalten, 2005; Alterowitz, 2014, Haraldsen, 2019). Learners who are full of fear and coercion are less able and willing to investigate, question, play, explore, and take risks, which does not foster an environment where deep learning can take place (Lakes, 2005). Empowerment involves people developing capacities to act successfully within the existing system and structures of power, while emancipation concerns critically analyzing, resisting, and challenging structures of power' (Inglis, 1997). Findings in a Norwegian study from the MDD context (Andresen, 2011) revealed a culture that hampered empowerment. Traditional conventions for dance education (i.e., dress code, no eating and drinking during class, use of mirrors, rules of attendance, national curriculum) encouraged both teacher-surveillance as well as self-surveillance of the students. Despite that the regulations from the Department of Education were quite open and flexible, the conventions of dance education pushed the dance training to a large degree in the wrong direction (Andresen, 2011). In another Norwegian study, controlling teaching styles appeared to socialize performers into being less self-determined and empowered (Haraldsen, 2019).

Data from student surveys show many who express frustration and a sense of uselessness because they aren't recognized, and they're dissatisfied with their perceived place in the hierarchy. (Haines & Torres, 2016). Only when noticed, you exist, which enhances conditional self- worth, lack of agency, and self-denial (Harrington, 2020). There is evidence of undergraduate students who experienced forceful teachers with high standards, ending up with dysfunctional habits and strategies such as tucking under, hyper-extended knees, forced turnout, and several other physical illnesses, injury, lack of feelings of connectedness and well-being, physical and emotional distress, preoccupation with weight and selfsurveillance, and pain prone to injury and damage (Green, 1999; Harrington, 2020). Moreover, controlling conditions nurture the constant striving for perfection (Pickard, 2012; Haraldsen, 2019, 2020, 2021). In a Norwegian study, 80% of the dance students reported dimensions of perfectionism and 30% reported a dysfunctional perfectionism (Haraldsen et al., 2021). This is morally or ethical questioned as evidence demonstrates that controlling conditions have the potential to create ill being and (Aalten, 2005; Alterowitz, 2014, Haraldsen, 2019).

Also, motivational consequences of the traditionalism way are found. Evidence showed an increase in ego-involvement and performance orientation over time, predicting an increase in anxiety. Also, students' perceptions of egoinvolving motivational climates negatively corresponded with the needs for competence and relatedness (but not autonomy; Chua, 2017). Moreover, studies have proved associations between controlling conditions and frustration of autonomy, competence, and relatedness, anxiety, negative affect, burnout, external motivation, amotivation, and decreased performance development curve and performance level (Haraldsen et al., 2019, 2020, 2021). Interestingly, the doctoral thesis of

Haraldsen (2019) revealed that these controlled practices unfolded as two-sided. On one side, they could provide a boost of competence development. For ambitious performers aiming for the top and operating within a positive cycle of development (e.g., mastery, success, flow, and high self-esteem), this seemed to work well, providing a strong, nurturing source of motivation. However, in the face of failure and adversity, the controlling and performance-oriented culture in pre-professional ballet education revealed a downside. Since the very essence of becoming a ballet dancer is about demonstrating superiority, the performers' positions and future possibilities were experienced as conditional on achieved competence and success. Stagnation and failure were challenges that clearly put the performers' quality of motivation to the test. Additionally, the types of motivation (i.e., intrinsic/self-determined vs. external/controlled) mattered, as performers regulated by self-determined motivation engaged in their performance development in a more joyful, robust, and healthy way (i.e., self-realization, flow, self-esteem, and vitality. They also showed less dependence on their given learning conditions. In contrast, performers regulated by controlled motivation reported higher vulnerability, and in turn, more ill-being (i.e., low self-esteem, perfectionism, obsessiveness, anxiety, negative affect, and exhaustion; (Haraldsen, 2019). Paradoxically, a lack of self-determination and authenticity are negatively associated with creative and artistic development, intrinsic motivation, and flow (Haraldsen, 2019; Hefferon & Ollis, 2006; Morris, 2003). Identified flow inhibitors are found to be lack of intrinsic motivation, self-doubt, negative thoughts of failure and anxiety, and trauma (Hefferon & Ollis, 2006).

However, there is evidence and anecdotal examples of how agency is played out within controlling conditions (Aalten, 2005; Haraldsen, 2019). Dancers reveal having critical reflections towards the culture, to 'old' repertoire or aesthetics, and to the hierarchical organizational structure - some negotiate their lack of empowerment by choosing a transition from ballet to contemporary style, or retire completely (Aalten, 2005)

#### The progressivism paradigm

Evidence from several studies present a convincing range of positive outcomes from teaching and learning within the progressivism paradigm compared with the traditionalism paradigm. These practices are found to be less competitive learning environments focusing on process instead of result, internal instead of external focus, and are more reflective in general (Roche & Huddy, 2015). This aligns with a more task-involving motivational climate, which is found to be positive for the well-being of dancers since students' perceptions of the task-involving climate positively predicted all need-satisfaction within the basic needs' theory (Chua, 2017). Also, findings show that the students who perceived their dance teachers as supportive of student autonomy reported higher levels of intrinsic motivation (Chua, 2017). Intrinsic motivation is linked to flow experience, and there is evidence that flow is a strong predictor of prolonged commitment and creativity (Hefferon & Ollis, 2003). Additionally, when teachers avoid being controlling, Haraldsen et al (2019) found they then functioned as a buffer towards students with perfectionistic tendencies. In contrast, students experiencing a controlling teaching style did report increased frustration of the need for competence and increase in external motivation, exhaustion, and anxiety (Haraldsen et al., 2019). In turn, associations between progressive teaching experience and intrinsic motivation, joy, and engagement, as well as increases in innovative and collaborative competencies have been found in Norwegian context (Østern, 2017; Østern & Irgens, 2019; Rothmund, 2019). Evidence of increased learning outcome, clarity in movement, increased fluency, increased student engagement and motivation were found in a project enhancing more democratic teaching practice in ballet (Ritchie & Brooker, 2019). Hence, there seems to be evidence of greater depth in learning and understanding within a holistic approach, which in turn, enhances engagement and motivation (Alterowitz, 2014).

Somatic practice - a central part of progressivism dance teaching - is explored in several studies. Results demonstrate that students displayed enhanced bodily connection, creativity, confidence, and critical understanding of tenets underlying somatic work, as well as some implications for dance techniques after experiencing somatic practices (i.e., exhibited new variety in movement quality and patterns; Weber, 2009). Students also became more aware and embodied, felt empowered and enjoyed a greater sense of well-being, and discovered greater creativity and autonomy within their dance practice (Weber, 2009). Additionally, somatic practice seemingly affects the agency of the dancers (Berg, 2017; Green, 2000). By facilitating a process by which students are also introduced to how bodies may be socially manipulated, controlled, and habituated, they may be able to take some ownership over their bodies (Berg, 2017; Green, 2000). In another study, students' participation led to increased growth as improvisers, greater sociopolitical awareness, and a better understanding of how they make informed decisions (Schupp, 2011).

On the negative side, implementing progressive dance pedagogy does not appear to be without its challenges. There seems to be resistance by the student themselves, by students highly socialized into the old way, to find the new, progressive way as a waste of time, ineffective, and troubling. All of which is out of line with the traditional way of teaching and learning in dance, and hence, they reject the implementation process (Alterowitz, 2014; Petsilas et al., 2020; Rimmer, 2017). To fully gain the fully potential of the progressive dance paradigm, a cultural change is needed (Petsilas et al., 2020; Alterowitz, 2014).

# Negotiation between traditionalism and progressivism paradigm

A central finding was that dance teaching seem to be a private, in contrast to team practice. This was to a great extent down to the dance teacher herself, which was also found in higher education dance institutions. The students appeared to perceive each teacher to have their own 'style' of teaching, requiring them to enter classes with 'different head[s] on (Rimmer, 2017). Hence, the dance students must adjust and cope in between different aesthetic and pedagogical paradigms almost

on a daily basis during their dance education (Haraldsen et al., 2020; Rimmer, 2017; Østern, 2017). In one dance lesson they might face an authoritarian and controlling teacher focusing solely on skill acquisition, and in the next, entering a reflective and creative dance class with the expectation of an active and reflective learning practice (Østern, 2017). In turn, this might nurture ambiguity, narrative tensions, and the feeling of a conflicting identity all of which are found to be associated with more emotional frustration, ill-being, and critical views towards the dance culture (Aalten, 2005; Haraldsen et al., 2021).

### Talent development in Dance (9 studies)

#### Talent identification

Research has shown that talent identification requires multiple means of identification. This should be considered together with talent development to allow for the effects of maturation (Walker et al., 2010). Taking into consideration that no model can guarantee success and that factors such as chance and timing can be essential, studies show that if combined, several types of models could demonstrate how talent criteria can be adapted at different stages of development (Walker et al., 2010). Many psychological factors can be enhanced through training and may not be eligible talent identification criteria - but they are essential to talent development (Walker et al., 2010). Thus, research suggests that the dancers of tomorrow might be difficult to identify today if the means of identification are too rigid or exclusive (Walker et al., 2010)

# Trajectories and age differences in talent identification

Studies have shown there are significant cultural differences, not only how dancer's talent are first identified, but also how their talent has been developed (Chua 2014; Hutichinson et al., 2013). While students in the Netherlands were between 10-15 years old when their dance teachers first told them that they were talented, dancers in the USA, Russia and Mexico have been identified as «talented» at a mean age of 8,47 (Chua, 2014). Overall, there seems to be two different systems for

developing ballet dancers (Hutchinson et al., 2013). Ballet training for children in more individual and Western-based cultures (i.e., American and Mexican cultures) mostly depended on the family's economic resourses. Subsequently, this leads to only a small number of young dancers eventually being selected for the best training or participating in elite ballet companies (Hutchinson et al., 2013). In contrast, in collective-based cultures (i.e., Russian culture), children with a promising body type are selected at a young age, supported by government subsidies and enrolled in educational environments characterized by emphasis and pressure on success (Hutchinson et al., 2013).

#### Talent development environment

Research shows that aspiring performers in talent development programs are not merely passively socialized but need to display active attempts in fitting and negotiating the talent environments and cultures (Haraldsen et al., 2021). Belonging in these elite cultures means to be part of an in-group of like-minded peers and professionals which share the same goals, interests, experiences and identity categories (Haraldsen et al., 2021). Cultural narratives, which circulate in these performance cultures and direct young talents' interpretation and existence in them, are mostly presented by a figure of authority such as teachers, coaches, gifted peers or the media (Haraldsen et al., 2021; Pickard, 2012; Chua, 2014). These «gatekeepers» have been mostly reported to be authoritative, while other students experienced their teacher/coach as more authoritarian (Haraldsen et al., 2020; Pickard 2012). This description of «talent factories» is, in other words, at odds with the holistic, student-centered perspectives on talent development (Haraldsen et al, 2021; Chua, 2016; Walker et al., 2010). Given the important role teachers have to play in the development of dance talent, it is important to be aware of the pressure and exposed situations vulnerable young performers in talent development environments might face (Haraldsen et al., 2021; Chua 2016; 2014). Furthermore, it is crucial that teachers and coaches become aware of the potential impact and consequences of their created learning conditions

(Haraldsen et al., 2021; Walker et al., 2010; Chua, 2014; 2016). Therefore, teachers/coaches are advised to «hear» their students and adapt their feedback to their process and identity development (Haraldsen et al., 2021; Chua, 2014; 2015; Walker et al., 2010).

#### Identity

Research suggests that the road to becoming an elite performer is situated and complex with many different elements at play (Haraldsen et al., 2021). Talent development in certain dance genres, such as classical ballet, encompass more than merely learning the school's or company's particular technique and style (Pickard, 2012).

There are core values engrained in the culture of ballet going hand in hand with the production and construction of a ballet body and traditional gender identities (Pickard, 2012). Young dancer's body become a capital which needs to be constantly worked and tweaked on during devoted, long hours of practice all while maintaining a single focus on dancing from a young age (Pickard, 2012; Haraldsen, 2021). Therefore, dancer's identities are perpetually connected to their bodies and constantly at the center of focus. Consequently, if the dancer's body is rejected so is «the self» of the dancer which leads to a loss of identity or self (Pickard 2012; Haraldsen et al., 2020). While some performers reported positive experiences including involvement, learning, growth and self-realization, others experienced being around the clock dedicated, eager, self-controlled and disciplined, especially when aiming for a future as an international top performer (Haraldsen et al., 2021, 2019; Pickard, 2012; Chua, 2014; Cairns, 2010). Rejection and disappointment induced by auditions or setbacks in assessments were seen as an essential part on the road to success which has to be expected and accepted as the «right» way, which means with coolness, stoicism and unshakable self-belief (Pickard, 2012; Haraldsen et al., 2021). Thus, adversity, striving and potential imbalances which even include perfectionism, self-criticism and emotional despair become means to prepare for greatness (Haraldsen et al, 2021).

#### **Motivation**

Apart from Creativity, motivation has been mentioned in several studies to play a pivotal role in the development of talent (Chua, 2014; Walker et al., 2010; Haraldsen, 2020; 2019; Hutchinson et al, 2013). Unsurprisingly, motivational conditions are important for motivational quality (Haraldsen, 2020; 2019; Walker et al., 2010). In autonomous conditions, teachers and coaches will focus on learning and personal development and relate to the performer's perspective, encourage exploration, offer relevant choices and provide relevant and constructive feedback (Haraldsen et al., 2020; 2019; Walkert et al., 2010). In the latter environment dancers are more likely to sustain effort, engage in training activities and capitalize on their high abilities and opportunities (Chua, 2014; Haraldsen, 2020; 2019). However, despite the latter nurturing autonomous motivation, optimal functioning, wellbeing and being considered supportive of adaptive talent development processes, performers seem to lack autonomous motivation and autonomy (Haraldsen et al., 2020; 2019). Controlling conditions, on the other hand, entail teachers and coaches pressuring performers and manipulating them in preconceived ideas, feeling and behaviors (Haraldsen, 2020; 2019). Furthermore, the latter has been shown to be positively associated with perfectionistic tendencies, needs frustration, controlled motivation and performance anxiety (Haraldsen, 2019).

### Deliberate practice

The role and impact of deliberate practice is a well discussed factor within talent development (Walker et al., 2010; Chua, 2014; Hutchinson et al., 2013). As one study shows, any differences associated with starting ages were not significant (Hutchinson et al., 2013). However, while highlighted as crucial for attaining expertise by some dancers, other studies highlight that deliberate practice tends to focus too much on quantity rather than quality. This differs in certain cultural backgrounds and ages and interplays with other aspects of the individual and environment (Hutchinson et al., 2013; Chua 2014; Walker et al., 2010). Other aspects, such as dancers focusing on

their individual self by means of curious inquiry, reflective practice, goal setting and receiving support from significant people such as peers, teachers and choreographers reveal iself as important aspects of successfully deliberate practice (Chua, 2014; Hutchinson et al., 2013; Walker et al., 2010).

#### Support

Support from a variety of sources, such as teachers, mentors, parents, peers, and financial resources have shown to be a key element in talent development (Chua, 2015; 2014; Walker et al., 2010; 201). These significant others did not only provide socio-emotional support but also inspired aspiring dancers' careers, offered them opportunities and acted, in some cases, as a «surrogate family» (Chua

2014; Walker at al., 2010). In addition to parental support and positive peer relationships, a task-involving motivational climate has been shown to enhance enjoyment, well-being, and adherence in dance (Walker et al., 2010). However, the young dancers' socioeconomic status and environment can be a limiting factor and must be, alongside other factors, such as teacher behavior and expertise, taken into consideration by talent development programs (Chua 2014; Walker 2010; Sanchez et al., 2013). Consequently, it is recommended that talent development programs implement a variety of support mechanisms and are aware that talent identification and development are influenced by physical, psychological, practice-related and social factors (Walker et al., 2010).

### Topic 2: Dance and Mental Health

Within the last few years, mental health has finally become more than a buzzword within the dance world. We start to acknowledge dancers as performing athletes that are more than just moving bodies. Yet, we have little overview of the scope of mental health challenges dancers are facing, which factors influence and impact them and how they build resilience after experiencing and overcome adversities. In this scoping review we were especially interested in focusing on the latter which has been formulated into the two following research questions:

RQ1: What are the mental health status and challenges in Western theatre dance students, teachers, and professional dancers.

RQ2: Which factors influence, impact, or relate to dance students', teachers', and dancers' mental health?

The data has been organized in two different categories: 1) stressors and 2) coping strategies. Each stressor will be introduced and discussed, followed by the matching coping strategy presented in the same manner. Then, some general coping variables will be presented.

#### Overview over stressors

Findings in a study points to 45% of the participating dancers suffered from at least one mental health issue during an academic year. 30% reported a mental health issue as their most severe health problem - of which general anxiety, stress due to external factors and constant tiredness were among the most reported challenges (van Winden et al.).

#### Stressors and stress (2 studies)

Overall, there are indications that dancers experience different kind of stressors which a study has categorized as personal stressors, interpersonal stressors, situational stressors, and cultural stressors (Blevins et al., 2020) Personal stressors included low confidence, poor performance and the impact of training demands and individual capacity for recovery

### Fact box: Definition of stressors:

Stressors are factors such as situations, obstacles or perceived difficulties we encounter in our lives that can have a detrimental effect on our physical and mental health.

Within dance, there are known sources of physical stress related to dance training, such as high physical workload, and requirements concerning technical skill and mastery of choreographic demands (Blevins et al., 2020). However, there are also psychosocial stressors related to environment (daily tasks and gasses such as managing finances and obligations), personal roles (perceived autonomy or control within a group, competition, social support) and major life events such as death, career or school transitions, injuries (Blevins et al., 2020).

#### Overview over stressors

Situational stressors: factors or concerns outside of dance training, worries about employability, finances and timemanagement issues.

Interpersonal stressors: factors that highlight competition and comparisons with peers, value being placed on the opinions of others and perceived difficulty living up to others' expectations of oneself (Blevins et al., 2020)

Cultural stressors: worries related to physical appearance, body image, conforming to aesthetic ideals (such as what a dancer's body should look like) and perceived ability to fit into the dance world (Blevins et al., 2020)

Environmental stressors: factors such as mirrors, dance uniforms.

*Personal stressors:* factors that cause low confidence and poor performance as well as impact of training demands and individual capacity for recovery (Blevins et al., 2020)

(Blevins et al., 2020). Interpersonal stressors entailed competition and comparisons with peers, value being placed on the opinions of others and perceived difficulty in living up to others' expectations of oneself (Blevins et al., 2020). Situational stressors, on the other hand, focused on concerns outside dance training, worries about employability, finances, and time-management issues. Cultural stressors included worries related to physical

appearance and conforming to aesthetic ideals, such as what a dancer's body should look like and the perceived ability to fit into the dance world (Blevins et al., 2020). In this review, we also identified environmental stressors such as mirrors and dance uniforms as an own category.

#### Situational stressors (7 studies)

General situational stressors included limited economic means, race/ethnicity, gender, high commitment and the sacrifice of social lives, friendships, and life goals outside of the dance environment. Consequently, negative outcomes from the latter include anxiety, weaker support-systems and thwarting of personal autonomy (Sanchez et al., 2013; Aujla et al., 2014).

#### Coping with Situational stressors (5 studies)

### Fact box:

#### Coping

Coping is the general term which describes the process of meeting, dealing with, - adapting to,- or overcome stressors, stressful encounters or situations

#### **Coping strategies**

Coping strategies can be a single or a series of actions which people apply to meet, deal with-, adapt to- or overcome stressors or stressful encounters and situations.

If applied strategies increase the experiences of stress or distress, such as substance abuse, binge eating and self-punishment, they are called maladaptive coping strategies. Studies have shown that maladaptive coping, to name just one example, increased stress levels among pre-professional dancers and increased injury frequency (Blevins et al., 2020). Successful coping strategies can, however, improve dancers' mental well-being and promote healthy habits and longevity in their career.

	Stressors	Coping with stressors
Situational	General: limited economic means, race, ethnicity,	General: Social support from parents and family; looking
stressors	gender, high commitment and sacrifice of social	after mental health and self-worth; being proactive in the
	lives, friendships and life goals outside of dance	navigation of their career; growing as an artist while
& coping	environment	living a life as a whole person
strategies	Negative outcomes: anxiety, weaker support	Positive outcome: increase in motivation; beneficial for
	systems and thwarting of personal autonomy	learning and coping; reduction and management of
		stress
Situational Stressors: Bennet, 2009; Blevins et al. 2020; Lopez, 2019; Polasek & Roper, 2011; Reis et al., 2019; Risner, 2014; Sanchez et al., 2013		
Coping with situational stressors: Aujla et al., 2014; de las Heras Fernandez et al., 2020; Kim et al., 2020; Lopez, 2019; Sanchez et al., 2013		

Social support, not only within the dance training environment but also outside the dance environment, such as from parents and other family members is of importance to motivation, learning and coping with situational stressors (Sanchez et al., 2013).

This is especially noteworthy considering that young dancers often sacrifice friendships and other experiences in their commitment to dance. The pressure to succeed as well as limited economic means can cause anxiety and a weaker support system in their lives (Lopez, 2019; Sanchez et al., 2013).

Rather, dancers can manage and reduce stress by looking after their mental health and selfworth, being proactive in the navigation of their career, and growing as an artist while living a life as a whole person (Kim & Tasker, 2020).

#### Interpersonal stressors (26 studies)

	Stressors	Coping with stressors
Interpersonal stressors	General: power exerted by authority figures result in cultural hegemony and dancers complying with institutional and cultural ideas an ideal.	<b>General:</b> Teachers important in promoting coping strategies; Educators should be perceptive of signs of obsessive passion, nurture positive motivation, flow, confidence,
& coping	Peers and teachers influence dancer's body image, eating attitude and overall ideals.	reducing fear and promoting social relationships with peers and professional collaborations; facilitating early
strategies	<b>Negative outcomes</b> : ego-orientation, limitations to dancer's performance development and wellbeing. Dancers might report healthy attitudes	training in self-development, self-and career manage- ment; forming holistic perspective on dancer's identity, aligning choices with larger sense of purpose, exercising
	while engaging in unhealthy behaviors. Social media and media become unreliable and unsafe source for information	self-direction; using strategies for creative problem solv- ing

Interpersonal Stressors: Alexias, 2011; Aujla et al., 2014, Aujla et al. 2015; Benn & Walters, 2001; Blevins et al., 2020; Blevins et al., 2020; Bottamini, 2000; Carr &vWyon, 2003; Dantas et al., 2018; de las Heras Fernandes et al., 2020; Dryburgh & Fortin, 2010; Green 1999; Hancox et al., 2017; Hamilton et al., 1997; Haraldsen et al., 2019; Haraldsen et al., 2021; Heiland et al., 2008; Kartawidjaja & Cordero, 2013; Kushida,, 2017; Macchi & Crossman, 2016; Nordin-Bates, 2020; Skaardal, 2006; Walker et al., 2012; Wenn et al., 2018

Coping with interpersonal stressors: Aujla et al., 2014; Aujla et al., 2014; Cahalan et al., 2019; Hancox, 2014; Hopper et al., 2020; Kartawidjaja & Cordero, 2013; Kim et al., 2020; Kveton-Bohnert, 2017; Minton, 2001; Mitchell et al., 2020; Mitchell et al., 2017; Nordin-Bates, 2020; Peters, 2020; Quested & Duda, 2009; Stanway et al., 2020; van Staden et al., 2009; Watson et al., 2012; Walker et al., 2012

# Interpersonal relationships in the dance environment (x studies)

The power exerted by authority figures in the dance environment are found to result in a cultural hegemony which seemed to influence dancers' participation in the system and their outward agreement with the institutional and cultural ideas (Benn & Walters, 2001; Dantas et al., 2018). This entails that peers and teachers influence dancers body image, eating attitude, ego orientation and overall ideals. Consequently, in such an environment, the stressors hamper dancers' performance-development and well-being (Critien & Ollis, 2006; Haraldsen et al., 2021; Harper, 2012; Lacaille et al., 2007; Stanway et al., 2020).

However, when teachers displayed supportive behavior, dance students appeared to digest and interpret such information *not always as intended* (Blevins et al., 2020). Also, students seemed to be affected by other sources than the training environment, such as media and social media (Blevins et al., 2020).

Thus, even though dancers did report healthy learning conditions, they may not be engaged in healthy behaviors when under such external media pressure.

# Coping with interpersonal stressors in the dance community (10)

Teachers play an essential role in promoting coping strategies that help dancers navigate stressors in the dance environment and improve their well-being. Being perceptive of signs of obsessive passion, nurturing positive motivation, flow, confidence, reducing fear and promoting social relationships with peers and professional collaborations might be crucial in aiding the students in handling stressors within the dance community. Furthermore, facilitating early training in self-development, self and career management, as well as forming a holistic perspective on dancers' identity, aligning choices with a larger sense of purpose, exercising self-direction, and using strategies for creative problem solving might be further coping strategies that should be promoted and enhanced in dancers (Van Staden et al., 2009)

#### Stressors

#### Cultural stressors

& coping strategies Dance community and environment: nurture performance pressure, rigid and narrow-minded identity, ego orientation, pressure and belief systems regarding body ideals, time constraints regarding development and nurture of psychological and physiological well-being, abusive power relations and adherence to

Negative outcomes: negative effect on dancers' self-esteem and body image, perfectionistic tendencies, injuries, demotivation, eating disorders, obsessive passion, inadequate sleep Body image and puberty: higher drive for thinness, self-objectification and negative self image in ballet. Conflict and struggle between normal pubertal change and well-established body ideals in ballet traditions and practices. Negative outcomes late maturing dancers: little time to adapt and adjust to physical and psychological development. Experience implications related to interactions with peers, identity as teenagers, anxiety about outcome of their physical development Negative outcome early maturing dancers: less

Negative outcome early maturing dancers: less prepared to deal with pubertal challenges, spent less time in childhood, higher dropout risk, vulnerable to psychosocial issues related to selfesteem, body dissatisfaction and disordered eating

#### Coping with stressors

Navigating and coping with Dance culture: how a dancer handles multiple stressors in the dance environment is just as essential as the physical and mental skills demanded within the dance culture; The more in-the moment and task oriented once remains during an event, the less likely anxieties will interfere with performance; Dance students should be made aware of the real life world of work by incoporating career management, selfmanagement and small business skills; Training of psychological skills such as goal setting, focus, simulation training and valuing individuality; Stimulate ability to evaluate negative experiences and their impact on perceived ability, self-esteem and motivation; Make appropriate use of social support (positive friend and mentors); applying emotion-focused coping strategies; making honest stress appraisal and realistic assessment of expectations of others, travel demands

Positive outcome: possibility to develop individual strengths and interests; empowering dancers to create sustainable careers; Environmental mastery, personal growth, optimism, establishing meaning and purpose, autonomy; positive relations with others; self-acceptance Navigating body image and puberty: Implementation of psychological skill training; encouraging critical thinking, questioning authority, gaining perspective and discussing how to cope with rejection;

**Positive outcome**: equips dancers for survival and success in a body focused culture

Cultural Stressors: Blevins et al., 2020; Blevins et al., 2020; Cahalan et al. 2019; Clements & Nordin-Bates, 2020; Dantas et al., 2018; de las Heras Fernandes et al., 2020; Fietze et al., 2009; Green, 1999; Haltom & Worthen, 2014; Heiland et al., 2008; Hoffer, 1981; Kartawidjaja & Cordero, 2013; Kosmidou et al., 2017; Kveton-Bohnert, 2017; Mitchell et al., 2021; Mitchell et al., 2020; Mitchell et al., 2017; Nieminen, 1998; Parker, 2011; Petrides et al. 2006; Pickard, 2013; Pickard, 2009; Polasek & Roper, 2011; Pollatou et al., 2017; Rodrigues et al., 2020; Skaardal, 2006; Swami & Harris, 2012; van Staden et al., 2009; van Zelst et al., 2004; Walter & Yanko, 2008; Wanke et al., 2015; Wenn et al., 2018

Coping with cultural stressors: Adame et al., 1991; Bennett, 2009; Carratini, 2020; Clements & Nordin-Bates, 2020; Critien & Ollis, 2006; de las Heras Fernandez, 2020; Downs, 2013; Hopper et al., 2020; Kim et al., 2020; Klockare et al., 2011; Kveton-Bohnert, 2017; Lopez, 2019; Mitchell et al., 2021; Pickard & Bailey, 2009; Redding & Quested, 2006; Rodrigues et al., 2020; Senning, 2020; Swami & Harris, 2012; van Staden et al., 2009; Watson et al., 2012

### Cultural stressors (36 studies)

# Dance community and environment (31 studies)

The dance profession and community might nurture stress, as studies in this review indicate with different demands and stressors on dancers that are influenced by the performance culture of which dancers are a part. This entails performance pressure, rigid and narrow-minded identity, ego-orientation, pressure and belief systems regarding body ideals, time constraints regarding development and nurture of psychological and physical well-being, abusive power relations and adherence to tradition.

Consequently, these stressors affect dancers' self-esteem and body image, also showing indications to result in perfectionistic tendencies, injuries, demotivation, eating disorders, obsessive passion and inadequate amount of sleep.

### **Body-image and puberty (5 Studies)**

Overall, there are strong indications that there is a higher drive for thinness, self-objectification, and negative self-image in ballet. Contemporary dance, on the other hand, has been repeatedly highlighted for individuals to develop healthier relationships with their bodies. Thus, the type of dance genre but also the length and time engaged in a particular dance

environment as well as the dancer's age and intensity of the classes might have an impact on dancer's sense of self and body image.

Therefore, dancers may experience conflict and struggle between normal pubertal change and well-established body ideals in ballet traditions and practices especially. Because the ballet environment prefers late maturation during puberty (Mitchell et al.; 2020), dancers face different challenges, depending on their individual maturation. Late maturing dancers have little time to adapt and adjust to physical and psychological development. Consequently, they experience implications related to interactions with their peers, their identity as teenagers and anxiety about the outcome of their physical development (Mitchell et al., 2020; Mitchell et al., 2021). Dancers who mature early are often less prepared to deal with pubertal challenges, having spent less time in childhood. They tend to have a higher dropout risk and are more vulnerable to psychosocial issues related to low self-esteem, body dissatisfaction and disordered eating (Mitchell et al., 2020; Mitchell et al., 2021).

#### Coping with cultural stressors (20)

Resilience seems to be a pre-requisite to manage rejection and other adversities in the ballet world (Pickard, 2013). However, how a dancer handles the multiple stressors in the dance environment is just as essential as the physical and mental skills demanded within the dance culture (Kveton-Bohnert, 2017). That means that the more in-the-moment and task-oriented one can remain during an event, the less likely anxieties will interfere with performance (Kveton-Bohnert, 2017).

Therefore, studies suggest making dance students aware of the real-life world of work. Sometimes this is done by incorporating career management, self-management and small business skills. This can offer the students the chance to develop their individual strengths and interests that will empower them to create sustainable careers. However, psychological skills, such as goal setting, focus, simulation training and valuing individuality do not develop naturally and dancers can't develop to their full potential without training

these skills (Redding & Quested, 2006; Carratini, 2020; Klockare et al., 2011).

Screenings, for example, can become a useful tool to identify mental health issues and aid the implementation of the above-mentioned psychological skills training in dancer's schedules (Redding & Quested, 2006). Implementing psychological skill training and encouraging critical thinking, questioning authority, gaining perspective, and discussing how to cope with rejection will thus equip dancers for survival and success in a culture that might perceive physical characteristics as less ideal (Mitchell et al., 2021; Klockare et al., 2011; Carratini, 2020; Redding & Quested, 2006).

However, negative experiences can also lead to a process of sophisticated reflection, readjustment, and the opportunity to refocus if the dancer could evaluate its impact on their perceived ability, self-esteem and motivation (Pickard & Bailey, 2009). Helpful adversity coping skills and strategies in these situations entail making appropriate use of social support, such as staying around positive friends and mentors, applying emotion-focused coping strategies, and making honest stress appraisals as well as realistic assessments of the expectations of others, travel demands, and injuries (Kveton-Bohnert, 2017 citing Harmison, 2006). Thus, resilience characteristics such as environmental mastery, personal growth, and optimism, establishing meaning and purpose, autonomy, positive relations with others, and self-acceptance seem to be an essential key for dancers to endure the rigors of training (Kveton Bohnert, 2017; Senning, 2020).

#### Environmental stressors (6 studies)

Mirrors and uniforms appear to be the biggest environmental factors impacting a dancers' self-image, body esteem and risk of developing eating disorders. Also, the general display of photos of extremely thin dancers in schools and studios seemed to have a harmful effect on dancers (Dantas et al., 2018; Dearborn et al. 2006; Radell et al. 2014; Li, 2011).

	Stressors	Coping with stressors	
Environmen-	General: mirrors and uniforms biggest factor im-	General: educational environments should be supportive	
tal stressors	pacting dancers' self-image and body esteem;	of critical thinking in artistic processes and the media;	
	General display of photos of extremely thin danc-	Let dancers critically analyze and acknowledge dangers of	
& coping	ers in schools and studio had harmful effect	emulating someone else; being aware that comparison	
strategies	Negative outcomes: dancers seem to become ab-	might lead to impossible standards;	
_	sent from their bodies, obsessing about individual	Dance schools can allow wearing of clothes in which stu-	
	body parts, increasingly seeing themselves as ob-	dents feel comfortable	
	jects rather than kinesthetic «feeling» humans;		
	increase risk of developing eating disorders.		
Environmental stressors: Dantas et al., 2018; Dearborn et al., 2006; Li, 2011; Kveton-Bohnert, 2017; Radell et al., 2004; Radell et al., 2014			
Coping with environmental stressors: Bennett, 2009; Heiland et al., 2008; Kveton-Bohnert, 2017; Li, 2011; Senning, 2020			

While dancers seem to see mirrors as necessary tools to facilitate technical growth, they also develop their own individual relationship to the mirror which in turn reflects who they are physically and how they view themselves (Radell et al., 2014). However, a negative consequence is that dancers seem to become absent from their bodies, obsessing about individual body parts and increasingly seeing themselves as objects rather than kinesthetic, «feeling» human beings (Radell et al., 2014; Dearborn et al., 2006).

**Coping with environmental stressors (5)**For dancers to cope with environmental stressors such as mirrors and the display of

photos, educational environments should be supportive of critical thinking in artistic processes and towards the media. This means to let dancers critically analyse and acknowledge the dangers of emulating someone else and being aware that comparisons might lead to impossible standards (Heiland et al., 2008; Kartawidjaja J.E. & Cordero, 2013). Furthermore, dance schools might allow for the wearing clothes in which students are comfortable instead of adhering to strict attire (Li, 2011).

Personal stressors (56 studies)

#### **Stressors**

Personal stressors

& coping strategies

Performance identity: pressure to identify with predetermined identities in dance environments. Expected behaviors such as dedication, passion and mental toughness

Negative outcomes: expectation of linear road to success; self-worth depending on success or the ability to «do things right»; physical and psychological social problems; obsessive passion, withdrawal; feelings such as shame; loss of self-esteem. Increase in risk behavior and, consequently, chronic injuries, maladaptive perfectionism, struggle with self-regulation

**Gender identity:** male dancers self identifies withor perceive a sexual minority status; more prone to bullying, teasing and harassment; Stereotypes, homophobia, heterosexism bias and harassment accepted as commonplace and expected, negotiated and endured; negotiating identities as men in gender codified dance form (ballet).

Negative outcome: male dancers need to challenge dominant cultural stereotypes of male dancers as gay, effeminate, weak, not athletic and not being real boys; management of stigma such as idolizing powerful, strong dancers, asserting heterosexuality, compare ballet to sports; hiding their profession; embarrassment about wearing dance clothes or carrying dance equipment; leaving dance not willing to challenge and resist stereotypes anymore

#### **Coping with stressors**

**Navigating dancer identity**: pre-professional dancers should receive early training in self-development with a holistic perspective on dancer's identity; Psychological skills training; Nurturing harmonious passion.

**Positive outcome:** promote well-being in dancers; self-defining activity; dance doesn't overshadow other aspects of life or taking up disproportionate part of one's identity; dancers more likely to stay engaged in dance

Navigating gender identity: support system (parents, friends, teachers, coaches) essential; Role models; Increased help by management; Teachers should be aware of social pressure of male dancers and work to counter negative assumptions and stereotypes; Educators can challenge dancers and give them extra attention

**Positive outcome:** higher self-esteem; decrease in stress, anxiety; fewer injuries; Role models help to prepare preprofessionals by identifying and foreseeing potential challenges; Alienate challenges connected to transitions out of profession.

Navigating eating disorders: Make students aware of the negative effects of comments about physical appearance of others; Dance schools and studios should follow a protocol which outlines actions and steps to early detect and prevent eating disorders; Nutritional assessments, wellness workshops, counselling; screening focusing on skeletal and muscular development, alignment and function. Teachers using anatomic terms in instructions and base feedback on the functionality of the body rather than physical appearance; Promote students' skills and personal

**Eating attitudes and disorders:** Overall warning signs include increased stress, perfectionism, fatigue, excessive exercising outside of dance, sleep disturbances and menstrual dysfunctions.

Negative outcomes: Eating disordered dancers shown to be more depressed, impulsive, emotionally disturbed, isolated and alienated from their work; described themselves as failures; felt physically unacceptable; remained at egocentric stage of development; ballet dancers seem at higher risk of developing eating disorders than contemporary dancers

**Injury:** Mental state of dancers influence both if injury might occur and how effectively an injury will be coped with; limited coping strategies, perfectionism, self-regulation, fatigue, sleep deprivation, stress and overtraining are risk factors for substantial injuries in dance.

**Negative outcome:** frustration, fear, distress, demotivation, anger and depression; fear of negative reactions of teachers and peers; feelings of guilt, fearing impact of injury on career; pessimism about severity of injury and time needing to heal; psychological trauma

**Perfectionism:** prevalent among pre-professional ballet and contemporary dance students; predictors include experiencing heightened perfectionistic strivings and concerns in comparison to themselves, picking up cues emphasizing comparison and normative abilities in their environment.

**Negative outcome**: debilitative imagery; greater anxiety; intensities and lower levels of self-confidence; increased risk to develop eating disorders; mental health problems in relation to self-critique and overly evaluative processes not to holding personal standards for performance or actions

strengths targeting dancers at risk rather than general population

**Positive outcome**: reducing overevaluation of extreme thinness; increasing satisfaction with body image; Early detection of eating disorders

Navigating injuries: effective coping strategies facilitate psychological adjustment to stressful and traumatic experiences of injury and improve recovery time; Therapists essential in offering emotional, informational and tangible support throughout the process; Coaches and medical professionals must acknowledge utilization of different coping styles and the need to change psychological meaning in the dancers' experience; Therapists, sport psychologists, medical professionals and teachers should work collaboratively in order to offer holistic approach to injury management; Identity those that might be struggling mentally but are not seeking psychological help or are showing maladaptive signs of coping; Goal setting, visualities and imagery integrated into rehabilitation and recovery programs; Evaluating media use and screen time; Short naps during daytime to compensate sleep deficiency; Enhancing physical and psychological fitness; Adopting objective stance to circumstances; Accepting the experience and maintain a positive mind-set; Teachers can encourage students to use psychological strategies, such as positive selftalk, social support, reading information about the injury and the rehabilitation process, writing journals, learning relaxation skills and setting SMARTER goals

**Positive outcome:** reduce negative emotions surrounding the situation; generate higher levels of happiness and self-esteem; Strategies might act as buffer against negative impact of injury induced time away from training and performing

**Navigating perfectionism:** dancers benefit from engaging in visualizations and multisensory image that led to an absorption in the tasks, which leaves little space for perfectionistic thoughts.

Practicing mindfulness and mindful learning strategies. Mindful learning facilitates focus, psychological flexibility and creativity

**Positive outcome**: foster the development of mental and emotional patterns which assist dancers to achieve flow in peak performance states; Reduce tyrannical self-criticism and nurture dancers' personal development toward self-compassionate and autonomous self-mentorship

Personal stressors: Archinard & Scherer, 1995; Aujla et al., 2014; Backlund & Wallén, 2016; Batur et al., 2003; Benn & Walters, 2001; Blevins et al., 2020; Blevins et al., 2020; Bonbright, 1995; Bottamini, 2000; Cahalan et al., 2019; Carr & Wyon, 2003; Clements & Nordin-Bates, 2020; Critien & Ollis, 2006; Green, 1999; Dantas et al., 2018; Downs, 2013; Fietze et al., 2019; Gittens, 2012; Haltom & Worthen, 2014; Haraldsen et al., 2019; Haraldsen et al., 2020; Haraldsen et al., 2021; Heiland et al., 2018; Hoffer 1981; Karin & Nordin-Bates, 2020; Kartwidjaja & Cordero, 2013; Kenny et al., 2019; Kveton-Bohnert, 2017; Liederbach & Compagno, 2001; Li, 2011; Macchi & Crossman, 1996; Mainwaring et al., 2003; Minton, 2001; Nieminen, 1998; Nordin-Bates et al., 2011; Nordin-Bates et al., 2014; Parker, 2011; Pentith et al., 2020; Petrides et al., 2006; Pickard, 2013; Polasek & Roper, 2011; Politt & Hutt, 2020; Puddu, 1998; Reis et al., 2019; Risner, 2014; Rodrigues et al., 2017; Schluger, 2010; Skaardal, 2006; Slater & Tiggemann, 2002; Solomon et al., 2002; Spadafora, 2010; Stracciolini et al., 2017; van Staden et al., 2009; Stornæs et al., 2019; van Winden et al., 2020; Walter & Yanko, 2018

Coping with personal stressors: Aujla et al., 2014; Batur et al., 2003; Bonbright, 1995; Carratini, 2020; Critien & Ollis, 2006; Dantas et al., 2018; Diaz et al., 2008; Downs, 2013; Fietze et al., 2009; Flower, 2019; Gittens, 2012; Haltom & Worthen, 2014; Karin & Nordin-Bates, 2020; Klockare et al., 2011; Kveton-Bohnert, 2017; Li, 2011; Macchi & Crossman, 1996; Mainwaring et al., 2003; Nordin-Bates et al., 2011; Nordin-Bates et al., 2011; Parker, 2011; Pentith et al., 2020; Pickard & Bailey, 2009; Politt & Hutt, 2020; Puddu, 1998; Redding & Quested, 2006; Risner, 2014; Solomon et al., 2002;

Studies show that dancers experience pressure to identify with predetermined ideal identities in dance environments (van Staden et al., 2009; Haraldsen et al., 2021). These entailed expected behaviors - such as dedication, passion and mental toughness - resulted in expectations of a linear road to success (Haraldsen et al., 2021).

With self-worth often depending on success or the ability to «do things right», dancers reported experiencing physical, psychological, and social problems and have shown indications of obsessive passion, withdrawal and displayed feelings such as shame and loss of self-esteem (Cahalan et al., 2019). Especially obsessive passion was shown to increase risk behavior and has been associated with chronic injury, maladaptive perfectionism, struggle with self-regulation and a persistence to dance through injuries (Cahalan et al., 2019).

#### Gender identity (5)

While opportunities should be offered based on skill rather than gender, data indicates that opportunities are still far from equal across gender (Clements & Nordin-Bates, 2020). Female dancers, for one, have reported their autonomy to be thwarted either directly through punishment or indirectly via elements of the training environment such as requiring corps de ballet members to train for longer hours (Clements & Nordin-Bates, 2020). Male dancers, on the other hand, self-identify with or perceive a sexual minority status and are therefore at least seven times more likely than the public to be bullied, teased, or harassed - regardless of their sexual orientation (Risner, 2014). Thus, stereotypes, homophobia, heterosexism bias and harassment are accepted as commonplace and expected, negotiated, and endured (Risner, 2014; Polasek & Roper, 2011). Furthermore, being part of the male ballet culture requires dancers engage in heteromasculinity in performance and negotiate their identities as men while performing a dance form that is highly stigmatized as effeminate and gender codified (Haltom & Worthern, 2014).

Consequently, male dancers report the need to challenge dominant cultural stereotypes of

male dancers as gay, effeminate, weak, not athletic, and not being real boys. (Risner, 2014; Haltom & Worthern, 2014; Polasek & Roper, 2011). Therefore, male dancers seem to engage in the management of stigma and negative stereotypes by idolizing powerful and strong performers, asserting heterosexuality by highlighting their access to women or mentioning girlfriends as well as making comparisons of ballet to sports in order to masculinize ballet (Risner, 2014; Haltom, 2014; Polasek & Roper, 2011). Additionally, some report not sharing their occupation with other people and expressed embarrassment about wearing dance clothes or carrying dance equipment (Polasek & Roper, 2011; Li, 2011). Finally, some subsequently leave dance due to not being willing to challenge or resist stereotypes any longer (Polasek & Roper, 2011)

#### Eating attitudes and eating disorders (11)

In general, there are indications that ballet dancers are at a higher risk of developing eating disorders than contemporary dancers (Nordin-Bates et al., 2011; Schluger, 2010; Benn & Walters, 2001; Dantas et al., 2018). While the latter seem more accepting of different body shapes and weight than ballet, the former shows patients with eating disorders who had extensive ballet training exhibiting significant differences in emotional deficiency, such as interoceptive awareness and maturity fears (Dantas et al., 2018; Archinard & Scherer, 1995). Stressors in the ballet environment such as mirrors, ballet aesthetics, demands of choreography, role models, the power of directors, choreographers, and teachers as well as the climate's ingrained power cultures and the cult-like behavior it induces might be significant indicators to why ballet dancers seem more prone to developing eating disorders (Benn & Walters, 2001; Dantas et al., 2018; Schluger, 2010). Consequently, individuals are still taking short cuts to meet physical ideals and are not heeding advice that was not related to the real demands of the profession (Benn &Walters, 2001).

Overall, warnings signs of disordered eating included increased stress, perfectionism, fatigue, excessive exercising outside of dance,

sleep disturbances and menstrual dysfunctions (Nordin-Bates et al., 2011; Batur et al., 2003; Rodrigues et al., 2020; Puddu, 1998). While these factors seemed prevalent in females, perfectionism seemed a common predictor variable for both male and female dancers. (Nordin-Bates et al., 2011).

As a result, eating disordered performers were shown to be more depressive, impulsive, emotionally disturbed, isolated, and alienated from their work than their healthy peers and described themselves as failures, felt physically unacceptable, and remained at the egocentric stage of development (Hamilton et al, 1997).

#### Injury (13 studies)

The mental state of dancers influences not only if an injury might occur but also how effectively an injury will be coped with. Studies show that coping skills, personality traits such as perfectionism and self-regulation, fatigue, stress and overtraining are amongst those that can be singled out as risk factors for substantial injuries in dance (Kenny et al., 2019; van Winden et al., 2020; Liederbach & Compagno, 2011; Pentith et al., 2020). While accumulation of stressors significantly related to onset of acute injuries, sleep deprivation has been reported to increase the risk for fatal errors and injuries (Fietze et al., 2009; Downs, 2013; Reis et al., 2019). Sleep data from two studies reflected ongoing stress in ballet dancers which increase before a premiere performance, highlighting that baseline sleep duration and sleep efficiency were already lower in this group than in the normal population (Fietze et al., 2009; Stracciolini et al., 2017; Reis et al., 2019).

Consequently, dancers have reported feeling frustration, fear, distress, demotivation, anger, and depression when first injured (Macci & Crossman, 1996; Backlund & Wallén, 2016). Thus, the immediate post injury period is one of maximum emotional disorganization. Shock-like responses might entail denial concerning the seriousness of the injury or the impact it will have on future performances or goals (Macci & Crossman, 1996; Backlund & Wallén, 2016). While several indicated that they feared the reactions of teachers, peers,

staff, and parents and what impact the injury would have on their dance career, some dancers said watching a class would evoke feelings of guilt and anger (Macci & Crossman, 1996; Backlund & Wallén, 2016).

Reactions during rehabilitation seemed, on the other hand, to vary between optimism to resume a career to pessimism about the severity of the injury and the amount of time to fully heal (Macci & Crossman, 1996). Furthermore, there are indications that it is the severity of the injury and the related degree of psychological trauma that will impact whether the dancer reacts adversely to the injury (Macci & Crossman, 1996).

#### Perfectionism (12)

# Fact box: Perfectionism

Perfectionism is usually considered to be a personality trait or disposition that influences domains of personal significance (Nordin-Bates et al., 2014). Further, it can be broadly defined as a combination of perfectionistic strivings and perfectionistic concerns (Nordin-Bates et al., 2014).

**Perfectionistic strivings:** capture aspects of perfectionism that reflect the pursuit of perfection and setting exceedingly high standards (Nordin-Bates et al., 2014)

**Perfectionistic concerns:** Perfectionistic concerns entail aspects of perfectionism reflecting concerns over performance, evaluative fears about others, and negative reactions to imperfection (Nordin-Bates et al., 2014)

Perfectionism, or perfectionistic tendencies, seems prevalent among pre-professional ballet and contemporary dance students (Haraldsen et al., 202; Nordin-Bates et al., 2014, 2011). Significant predictors for female dancers entailed, for example, experiencing heightened perfectionistic strivings and concerns in comparison to themselves (Nordin-Bates et al., 2014; Schluger, 2010). It also seems that dancers who pick up on cues emphasizing comparison and normative abilities in their environment are more likely to develop a dispositional tendency to define achievement in

socially comparative terms (Carr & Wyon, 2003).

Consequently, perfectionism can be linked to debilitative imagery, greater anxiety intensities and lower levels of self-confidence (Haraldsen et al., 2021; Nordin-Bates et al., 2014, 2011). Furthermore, perfectionism is a common predictor variable for eating disorders in both male and female dancers (Nordin-Bates et al., 2014). Other research findings indicate that mental health problems related to perfectionism can be seen in relation to self-critique and the overly evaluative processes and not to holding personal standards for performance or actions per se (Stornæs et al., 2019).

# Coping with personal stressors (29 studies) Dancer identity coping (9 studies)

Several studies point to the stringent demand that the ballet profession and community imposes on dancers. It therefore suggests that pre-professional dancers receive early training in self-development with a holistic perspective with regards to the dancer's identity (Solomon et al., 2002; Diaz et al., 2008, van Staden et al., 2009).

Also, psychological skills training, including goal setting, focus, imagery and simulation training, might be essential to promote wellbeing in dancers (Carratini, 2020, Redding & Quested, 2006, Klockare et al., 2011). Furthermore, looking closer at a younger population. Research shows that young dancers exhibiting harmonious passion adhere to self-defining activity due to their passion while this doesn't necessarily overshadow other aspects of life or taking up a disproportionate part of their identity (Aujla et al., 2014, 2015).

Thus, nurturing harmonious passion might be key to contributing to aspiring dancers' well-being as well as enabling them to stay engaged in dance (Aujla et al., 2014, 2015).

### Gender identity coping (4 studies)

Research offers several useful suggestions ofhow to aid male dancers in coping with obstacles they might face. A support system, of which parental support was highlighted as most important, is essential. This, especially considering that perceived social support seemed more significant than actual support received, resulting in decreased depression, stress, anxiety and a higher self-esteem as well as fewer injuries.

Role models such as male professionals or senior students might also help to prepare pre-professionals by identifying and foreseeing potential challenges that they might face and boost their self-esteem (Li, 2011). The latter and increased help by the management might also help to alienate challenges connected to transitions out of the profession, such as the closed nature of the dance world inhibiting reaching out to other areas of social and professional life, causing lack of confidence and dependence on the institution (Parker, 2011). Furthermore, teachers seemed aware of the social pressure male dancers might face and worked to counter negative assumptions and stereotypes by challenging the dancers and giving them extra attention (Posalek & Roper, 2011; Li, 2011).

# Coping with eating attitudes and eating disorders (5 studies)

Overall, it is important to make students aware of the negative effects comments about physical appearance have on others (Dantas et al., 2018). Specifically for teachers this means the use of anatomic terms for instructions, basing feedback on the functionality of the body rather than physical appearance and promotion of a students' skills and personal strengths thus reducing the overevaluation of extreme thinness and increasing satisfaction with body image (Dantas et al., 2018). Studies further suggest that dance schools and studios should follow a protocol which outlined actions and steps to early detection and prevention of eating disorders (Dantas et al., 2018; Bonbright, 1995). These protocols should entail measures such as nutritional assessments, wellness workshops, counselling, screenings focusing on skeletal and muscular development, alignment, and function (Bonbright, 1995). However, it might be feasible to target those dancers at risk when developing such a program instead of the general population of university or dance students (Batur et al., 2003).

#### **Coping with Injury (8 studies)**

Because effective coping strategies might facilitate psychological adjustment to stressful and traumatic experiences of injury and improved recovery time, therapists play an essential role in the dancers' rehabilitation by offering emotional, informational, and tangible support throughout the process (Pentith et al., 2020; Macci & Crossman, 1996). However, it seems essential that coaches and medical professionals acknowledge the utilization of different coping styles and the need to change the psychological meaning of the dancers' experience in order to facilitate the coping process (Pentith et al., 2020). Furthermore, therapists, sport psychologists, medical professional, coaches, and teachers should be encouraged to work collaboratively in order to provide a holistic approach to injury management and also to identify those who may be struggling mentally but are not seeking psychological help and support, or are showing signs of maladaptive coping (Politt & Hutt, 2021; Macci & Crossman, 1996 Mainwaring et al., 2003).

Overall, effective tools include goal setting, visualization and imagery which can be integrated into rehabilitation and recovery programs or even into a collaboration between physical therapists and psychologists (Politt & Hutt, 2021; Nordin-Bates, 2020; Mainwaring et al., 2003). Evaluating media use and screen time as well as including short naps during daytime, might further compensate for sleep deficit and assist dancers toward improving their training intensity, enhancing physical and psychological fitness and avoiding injuries and fatal errors (Fietze et al., 2009; Stracciolini et al., 2017)

Adopting an objective stance to circumstances, accepting of the experience, and maintaining a positive mindset might also reduce the negative emotions surrounding the situation and generate higher levels of happiness and self-esteem (Pentith et al., 2020). Furthermore, teachers can facilitate recovery by encouraging their students to use psychological strategies (Mainwaring et al., 2003).

These include promoting positive self-talk, social support "get togethers", reading information about the injury and the rehabilitation process, journal/logbook entries of experience and goal setting, learning relaxation skills as well as setting SMARTER goals (Mainwaring et al., 2003). Thus, such strategies might act as a buffer against negative impact of injury induced time away from training and performing (Pentith et al., 2020).

#### Coping with perfectionism (3 studies)

Overall, it seems that dancers benefit from engaging in visualizations and multisensory images that seem to lead to an absorption in the tasks, which leaves little space for perfectionistic thoughts (Karin & Nordin-Bates, 2020; Kveton-Bohnert, 2017). Another study has shown that mindful learning facilitates focus, psychological flexibility, and creativity which, in turn, can reduce tyrannical self-criticism and nurtures dancers' personal development toward self-compassionate and autonomous self-mentorship (Kveton-Bohnert, 2017).

Therefore, practicing mindfulness and mindful learning strategies might be well suited measures to foster the development of mental and emotional patterns which assist dancers to achieve flow in peak performance states (Flower, 2019; Kveton Bohnert, 2017).

### General coping variables (26 studies)

Reviewing and screening the research included in this review has shown that there were different general coping variables, such as motivation, creativity, and emotional intelligence, which seemed important either for the development or the promotion of coping strategies and coping processes when faced with a range of different stressors. Each of these will be outlined in turn.

#### Motivation (16 studies)

#### Fact box:

#### **Motivational climates**

Task oriented climate: a climate in which effort, personal and collective improvement is rewarded, cooperative learning is encouraged, the contributions of every dancer are acknowledged and mistakes are responded to with informational feedback instead of punishment both verbally and physically (Quested & Duda, 2009; Aujla et al., 2014; Hancox et al., 2017).

This climate enhances autonomous flow, supportive relatedness and an increased focus on creativity and well-being as well as artistic dimensions (Haraldsen et al., 2019; 2020; 2021; Tvedt, 2011; Aujla et al., 2014; 2015; Quested & Duda, 2009; Hancox, 2014; Hancox et al., 2017).

**Ego oriented climate:** a climate in which mistakes are punished and competition is enhanced; might predispose dancers to higher levels of trait anxiety, nurture perfectionism and heighten perfectionistic characterizations such as setting high standards, fear of failure and inability to accept personal mistakes (Carr &Wyon, 2003). Other negative outcomes include controlled motivation, depression, and performance anxiety

As highlighted in the first section, teaching and learning affect the conditions and personal factors such as a performer's motivation and psychological functioning (Haraldsen et al., 2020; Hancox, 2014; Aujla et al., 2014, 2015; Quested & Duda, 2009). Task-oriented climates, in this respect, shown to have a positive impact on the dancer's mental health (Quested & Duda, 2009; Aujla et al., 2014; Hancox et al., 2017).

Ego-oriented climates, on the other hand, punish mistakes and enhance competition. Hence it might consequently predispose dancers to higher levels of trait anxiety, nurture perfectionism and heighten perfectionistic characterizations such as setting high standards, fear of failure and inability to accept personal mistakes (Carr & Wyon, 2003). As adherence is associated with the perception of a task involving motivational climates, students that might perceive ego-oriented climates in their training are at higher risk of dropping out (Aujla et al., 2015). However, climates can be perceived differently and can vary within

dance genres. Perfectionism might, for example, be coloring dancers' perceptions of the motivational climate (Nordin-Bates et al., 2014). In turn, motivational climate can reinforce the achievement behavior associated with perfectionism and be a significant predictor for eating disorders in male dancers (Nordin-Bates et al., 2011; Schluger, 2010).

#### Creativity (8)

Like motivation, creativity also seems to be involved in complex interaction with many personal and environmental dimensions (Watson et al., 2012). Overall, autonomy, alongside variety and opportunity, seems to have played a key role in the choreographer's development of creativity (Nordin-Bates, 2020; Clements & Nordin-Bates, 2020). Perhaps unsurprisingly, creativity seems more nurtured in contemporary dance than ballet which could be explained by the less autonomically supported ways ballet tends to be taught in (Nordin-Bates, 2020). This is significant considering that dancers need to show active involvement and willingness to participate in a creative task which also requires letting go and making space for ideas that arise imaginatively and unconsciously (Watson et al., 2012). Hence dancers, who are often either taught to fear or are intrinsically afraid of making mistakes, require support and encouragement from the environment to free themselves from the worry of being wrong (Watson et al., 2012). Therefore, traits such as perfectionism may hinder creativity and make the intrinsic motivation and intense task focus required for creative work unlikely (Nordin-Bates, 2020; Karin & Nordin-Bates, 2020).

#### Emotional intelligence (2)

Emotional intelligence (EQ) has given good indications about how people cope and why they adopt certain coping strategies (Petrides et al., 2006; Wenn et al., 2018). Individual backgrounds, differences in work experience and personal characteristics explain the personal differences in EQ (Wenn et al., 2018; Petrides et al., 2006). For example, participants revealed different personal characteristics, such as being patient, positive and passionate, lack of self-control or lack of resilience. These in turn also varied in EQ values.

Individuals that scored high on EQ facets such as self-esteem, happiness and optimism reflected a generalized sense of well-being extending from past achievements and future expectations (Wenn et al., 2018). Overall it tended towards dance teachers with more teaching experience having stronger emotional intelligence than those with less experience (Wenn et al., 2018). This is consistent with previous research that suggests teachers develop a stable set of core beliefs about their teaching abilities as they gain experience (Wenn et al., 2018). Further, there are indications that EQ might be an antecedent to resilience where high EQ facilitates resilience to stress, while low EQ might be an indicator of lack of resilience (Wenn et al., 2018).

### General discussion

# Research design, methodology and quality

Comparing the research traditions in the two main sections of a) pedagogy - mainly positioned within a qualitative paradigm drawing on philosophy, sociology, and phenomenology, and b) mental health - mainly positioned within dance science, medicine, and psychology - both revealed quite large methodological discrepancies.

Identified studies within the Teaching and Learning section were in general more practically oriented. These often applied a philosophical or sociological stance and used smallscale qualitative action-based research. As a result this field appeared more explorative, less empirically sound, and more anecdotallybased than research in the Mental health section. A parallel of this overall finding might be reflected in the Scandinavian dance research environment. Traditionally, dance science in Norway has been being rooted in research fields such as phenomenology, humanistic and historical tradition, and sociology, and less anchored within psychology, medicine, and physiology.

This concept also translated into the research quality. In the teaching and learning section, there were issues regarding research quality, such as a lack of distance (by placing the role as researcher within and personally involved in the heart of the research), and failing to document reflexivity and general rigor in the method sections. We also have some concerns about the quality of the most sited research journal of dance education. The overall quality is in the lower range in comparison to other areas such as sport science or educational science in general. We also noted that the identified high-quality studies appeared not to choose to publish their studies in specific dance journals. Instead, they published in more high-ranking journals within the field of sport science or more general educational journals.

Conversely, reviewing the identified studies in the Mental health section revealed studies following a more traditional empirical format through conducting mainly evidence-based research projects. By documenting and reporting issues such as bias, methodological procedures, reflexivity, ethical considerations, and rigor, these studies generally appeared to be of higher quality. However, a weakness of these studies within the mental health section seemed to be the lack of explorative and applied approaches, and hence, there is a potential in developing a more sound connection between theory and practice.

Overall, studies within the dance research community seemed to lack robust and sophisticated rigor and quality. They did not seem to be replicated nor re-examined sufficiently, which might lead to a lack of building on-and-strengthening of prior acquired knowledge. Instead, there seemed to be a problem with too many studies based on anecdotical evidence and small-scale single studies that lack a systematic and collaborative approach.

Likewise, when reviewing the range of population entailed in this scoping review, there seemed to be a preoccupation on pre-professional dancers and HE-students, while only a handful of studies focused on professional, mature, or retired dancers. Furthermore, most studies focused on ballet dancers, perhaps since ballet and its structure presents variables that appear to be easily measurable. However, more research of a variety of dance genres seems overdue.

# Resilience and Ethics in Dance Education

To present an overview of the findings we will focus the discussion within and across the two main topics. We have structured this discussion focusing on both the research questions, but it is also linked to the scoping review's sub-themes, as outlined in the introduction.

#### Teaching and Learning

# RQ1: What characterizes the teaching and learning in western theatre dance?

An overarching finding in relation to the first research question was the existence and preoccupation of the dichotomy and tensions between the two main teaching and learning paradigms: traditionalism and progressivism.

When putting all the reviewed studies and evidence together, the picture became clearer-there is robust evidence pointing to the need for a shift in the teaching and learning culture in dance that favours a progressive dance education. A contradiction seemed to exist between the liberating power that an arts education can provide and the continuing history of authoritarian teaching modes in the dance field, noted by several scholars (e.g., Dragon, 2015; Lakes, 2005; Østern, 2017).

The research analyzed in this review highlighted - the need and benefits of consciously raising awareness of *how* we teach and acquire knowledge and, the identification of the inherited 'doxa' (things taken for granted and socialized). For example, this entailed challenging traditional ideas and practices as well as acknowledging and questioning tacit knowledge through a reflective, critical, and transformative learning practice. Thus, research points to a need for a transition from a tacit, private educational culture to a collective and critical pedagogical performance culture.

Since the traditionalism way, rooted in conservatoire-style dance teaching, utilized a hierarchical, teacher led and authoritarian approach, current discourse has begun to question how dance education can develop technical insight and artistic abilities without hampering students' ability to engage actively, creatively and by using own agency.

In this review, we have identified a lot of anecdotal evidence and qualitative small-scale studies on dance teaching and learning. A red thread through these studies is a growing in-

terest in practice-based action research interventions and case-studies in the field, testing out new strategies to embodied somatic learning, skill acquisition, enquiry-based and student-centered learning, agency, and coproduction in performance. These then enhance the 21st century skills of critical thinking, creativity, communication, and collaboration.

This identified movement towards a paradigmatic shift from within the dance culture challenge the older, authoritarian teaching style. One might question if these studies and examples represent the 'few eager and progressive' or 'the many' in the dance field. Do they in fact represent a real shift in teaching and learning in dance? While the review documented a quite nuanced picture of varied practices, at the same time, it also presented robust evidence of a replication of the same old traditional ways.

However, both traditions seem to co-exist to some degree. As such, this paradigmatic dichotomous situation is not a black and white picture, or as it might look like in the overview table (see Table 21). This co-existing of two paradigms might create ambivalence within the dance students that need to cope with changing learning cultures on a daily basis.

Despite the fact the paradigms seem to follow the line of dance genres, making classical ballet the most traditional, and the contemporary the most progressive, it is not the context or dance genre per se that determines teaching and learning quality or paradigmatic positioning. For instance, some traditional, and technique-based approaches have transformed into the more progressive field of somatic dance education (Dragon, 2015; Rothmund 2019; Østern, 2017). On the other hand, the apprenticeship culture, the tacit taken for granted knowledge, lack of critical reflection, and teach as you were taught, are also identified within more progressive -based practices (Dragon, 2015). In other words, it is not the 'what', but the 'how' that seems most important. Specifically, how dance pedagogies or choreographic processes are led and organized, are of most importance for the quality

of the experiences of the dance students and dancers. Hence, which paradigm the teachers work within and how they approach teaching and learning are vital, more than the type of dance technique per se. A more progressive and democratic approach to teaching aesthetic dance forms does not mean students will not develop strong technical expertise or gain thorough understandings of specific traditional dance techniques. Rather, such learning occurs from a more holistic perspective when students can be more actively engaged in own learning, critically reflect, exert agency, and undertake responsibility for their personal movement choices.

How to implement the shift? We advise a change from within. Changing the 'how' does in time change the 'what". We must break the traditional apprenticeship-learning chain, so that new generations evolve (Lakes, 2005). However, there seems to be a gap between the evidence-based and experienced-based stakeholders in the dance fields, creating difficulties in how to implement evidence-based dance practice. Also, despite the 'old news' and sound evidence for change, the way dance teaching and learning are culturally embedded, appear to make change difficult. Hence, change is challenged from 'above' (culture, structures), 'within' (socialized and doxit attitudes in teachers/choreographers), and 'below' (socialized attitudes and expectations from students).

Some positive changes seem to be on the way, especially in some cultures (for instance UK/US dance institutions), that have succeeded in creating collaborations between dance researchers (evidence-based knowledge) and the dance practitioners (experience-based knowledge). This has pointed towards the importance of also targeting structural change, when changing practice is a goal. Also, focusing on lifelong learning, implementing more pedagogical information and teaching courses, and the implementation of pilot projects that explore new evidence-based and ethically sound ways of teaching and learning in, through and from dance might be useful strategies towards change.

The concept of 'transformation' might be at the core in these matters supporting change from within. This is a situation where learners get the opportunity to engage in transformative processes that challenge his or her tacit, taken-for-granted assumptions, beliefs, values, and expectations. "It is no coincidence that this heightened sense of criticality developed around the same time I was undertaking a teaching qualification for higher education" (Rimmer, 2017, p.222). However, change of traditions and cultures is not a quick fix, and need to be addressed in a long-term and systematic way.

RQ2: How does the teaching and learning tradition impact on identity, interrelationships, agency, teaching practice, and ethics in dance students, dance teachers, and professional dancers?

The second research question is about consequences of the different teaching and learning paradigms and practices. This involved several subthemes, outlined in the introduction.

Comparing the two teaching paradigms, studies in the scoping review clearly point out that the newer, progressive-based teaching styles (authoritative) are more beneficial for dance students' health, development and well-being. This way of teaching nurtures a) autonomy and empowerment, b) collaboration and relatedness, and c) creates a task-involving teaching climate that fosters mastery and competence development. Authoritarian teaching, on the other hand, seems to trigger the creation of maladaptive identities and has a negative impact on self-worth, self-esteem, and self-compassion which, in turn, might result in risk behavior and maladaptive coping strategies.

Evidence from this scoping review highlights that most of the teaching and learning in dance practices are based within the traditionalism paradigm. However, in cases where a more progressivism-based teaching and learning took place, the results show that students and dancers experience freedom, agency, meaningfulness, intrinsic motivation, creativity, personal development, and transformative

learning. These learning cultures are also found to be less competitive, more collaborative, reflective, and non-hierarchical.

There also seems to be a gap between the teachers' and students' perceptions and wishes. While teachers seem to overestimate their own teaching style and quality, students tend to wish for more democratic behavior, student-centered learning, positive feedback, and less of the authoritarian and controlling teaching style.

While teaching and learning traditions have been discussed at length in several studies, there have been only a few studies addressing ethics, relatedness and the challenge of power relations between teacher and student. This was a bit surprising, given the hierarchical nature and asymmetric power-relations that exist between both teachers and students in dance education, and between choreographer/ company leaders and dancers in the dance profession. However, the few studies that did address this important matter highlighted, a) the importance of being ethically aware of the power and stakeholder position that dance teachers and choreographers keep, and, b) the potential negative consequences that this unbalanced power-structure and controlling conditions have on performers' motivation, enjoyment, and well-being. Applied strategies are needed to balance the scale and the need for future research on this topic is crucial and urgent.

#### Mental health:

RQ1: What are the mental health status and challenges in Western theatre dance students, teachers, and professional dancers?

Findings show that dance students, dancers and dance teachers are at high risk of experiencing mental health challenges. A range between 30-50% of the dance population (relative to different studies and measures) seem to suffer from at least one mental health issue during a year, while one third has reported a mental health issue as their most severe

health problem of which perfectionism, general anxiety, stress due to external factors, eating disorder, and constant tiredness were among the most reported challenges.

RQ2: Which factors influence, impact, or relate to dance students', teachers', and dancers' mental health?

As outlined in the analysis of this review, many different impactful stressors could be detected: environmental, situational, interpersonal, personal, and cultural.

Participants in several studies have been describing certain cultural stressors within the dance environment as "part of the deal" and something that simply has to be endured. Pressure from above, below and within are, in other words, tacitly expected, accepted, and cultivated. These findings highlighted that traditions are running deep in dance and that challenging these traditions to instigate a much-needed change represents a difficult, albeit not impossible, task to undertake.

Only a few studies have outlined certain important factors such as social and ethical backgrounds and financial means (situational stressors). This is a significant gap which points to a lack of important information which would increase awareness and understanding of the dancer's means, support system and environment.

When taking a closer look at the personal stressors addressed in the review, many dancers appear to be their own worst enemy by possessing little knowledge about how to attend to injuries, mental health issues, restitution and building a life outside the dance environment.

It became apparent though, that how and to which extent these stressors manifested themselves varied between the different dance genres investigated in the different studies. Despite the majority of the studies in this review investigating ballet dancer's mental health, classical ballet appears to still foster a very traditional and mentally tough performance culture in which dancers' mental well-

being is not given the attention it desperately needs. Other genres such as jazz seem to share some of classical dancer's worries concerning body image, gender identities and stereotypical body ideals connected to dance. Social media focus and general commercialization of the body also affect dancer's body image and self-esteem. However, the latter and the dancer's mental well-being has, so far, received little attention within research. Contemporary and modern dance seem to have shifted towards a more progressive view on the cultivation and reflection of positive body image, albeit with little research focus on specific stressors and mental health issues.

Overall, there has also been little focus on freelance dancers and a lack of investigation into whether this group experiences the listed stressors the same way as dancers employed in companies. Furthermore, none of the studies dedicated their attention to the importance of transitions (not only out of the profession into retirement but also in other areas such as from childhood to puberty, within school levels, from school to company or freelance life...) and their impact on dancer's mental health.

Many studies have coupled their investigation into specific stressors with suggested coping strategies. However, only a handful of the latter are thoughtfully presented as helpful tools for both teachers and students alike while a majority chose to outline their strategies on a more generalized level. Only a few of the presented coping strategies have been practically applied and almost none of the studies in this review have been replicated. In other words, little data exists on the efficiency and applicability of these coping strategies in a variety of target groups. Considering that environmental stressors such as poverty and racism and personal stressors such as injuries and perfectionism, to name but a few, can seriously affect dancer's mental health and promote maladaptive coping strategies, more applied research in this area is long overdue.

As this review has highlighted, very little has been specifically written about resilience. While some studies concluded that certain, successfully applied coping strategies might potentially promote resilience and how it possibly might be nurtured, we know little about how resilience manifests itself in dance and what factors contribute to dancers becoming and perceive themselves as resilient. None of the studies addressed the ambivalent discussion whether resilience is a character trait or a process but rather chose to point to its unclear state. However, new studies within sport investigate the connection between Self-Determination Theory and growth seeking behavior. The latter could, apart from the other factors highlighted in this section, represent an interesting starting point for further investigation of resilience in dance as well.

## Applied reflections

Performance culture and teaching paradigms are controllable and changeable which makes them an important starting point to instigate change. It is within educational settings that awareness and consciousness of the tacitly how and why in teaching and learning can be raised and explored. As such, traditions and personal attitudes colored by these traditions should be investigated and changed from within. The need for a paradigmatic shift into more student-centered teaching and learning seems clear and evidence based. Some take home messages might be to apply some of the different strategies for teaching and learning that have already been put forward within the new progressive learning paradigm:

- ✓ Integrate somatic practice that links body, emotions, and mind.
- ✓ Integrate reflective practice and critical thinking
- Enhance improvisation, creative processes, and co-production
- Develop teaching designs that implement inquiry-based, active learning and student agency
- ✓ Implement ethical awareness and new power structures
- ✓ Look more to the future and the need for stimulating the 21st

 century skills; critical thinking, creativity, communication, and collaboration.

A more systematic focus on the role of mental health in dance might also present new possibilities to introduce students to psychological skill training. Previously, this has often been either neglected or introduced very late in dance students' lives. However, presenting and learning how to apply these tools and coping strategies throughout dance education is likely to equip younger dancers in meeting stressors embedded in both their own mind-sets and environments.

The importance of evidence-based, applied work which connects the theoretical and research based with the practical and experience based cannot be understated. This review has shown that good ideas and suggestions in research remain just theories unless practically applied, evaluated, challenged, and replicated. Likewise, anecdotal evidence and sole focus on applied work seem to result in little evidence-grounded work with questionable quality and general applied relevance. In other words, the constant connection between the experience-based and knowledgebased (theory and research) is essential in order to conduct high quality research which has the power to instigate needed, lasting and positive change.

### Future research

As this review has shown, there is need for future research within different topics. In relation to the first reviewed topic; teaching and learning in dance, too much focus and studies have been myopic in zooming in on the tensions between the two main paradigm of traditionalism and progressivism. Yet, this discussion is 'old news' since it has taken place for centuries in the field of general education. Coupling that with extensive and persuasive evidence which this scoping review is only adding more fuel to the fire. We do not need more studies investigating how learning works, or the benefits of learning strategies

grounded in constructivism and social constructivism. Instead, we need more interventionist studies that explore and test how to implement these learning principles into real teaching and learning practices, which should then be shared and spread through their applied knowledge. Further, we need more research on interrelations, communication, power structure and ethics, as well as topics within the field of didactics (curriculum, assessment strategies, and how to facilitate a collaborative, in contrast to privatized, teaching culture).

In relation to the second subject area - dance and mental health - other important topics and issues are left behind. We have identified little explicit data on either what or how relate to the concept of resilience in dance. We know, for example, little about what factors contribute to resilience manifesting itself in dancers. There were also few studies addressing the actual applying of the suggested coping strategies. That means future research should focus on the resilience process as a whole as well as the applied strategies and effects of coping strategies investigated in previous studies. Also, little attention has been raised towards important topics such as transitions between childhood and puberty or different school levels, out of school-into-company, within freelance life, and diversity within western oriented dance traditions (decolonialization, sexual orientation, social class). Further research examining these important themes is in dire need.

Overall, future projects should be mindful about connecting the applied with the theoretical and view them as two complementing parts instead of separate units. That will strengthen the rigor and quality in dance research and would allow for easier replication processes within the different dance research fields.

### **Strengths and Limitations**

This scoping review has several strengths. First, a thorough and systematic approach over a two-year period based on a pre-defined PRISMA-based protocol. Second, the assistance given by the librarian staff, and the use of several databases in the main search, extensive hand search, and the assistance of Rayyan as a screening tool, offering blind function and paired screening processes. Lastly, the peer debriefing process over several phases and the use of reference groups.

There are also limitations. One important aspect is the broad scope with two different, yet partly overlapping topics. This challenged the process of structuring the thematic analysis, how to divide or share the identified studies into the two topics, and how to present the overall summarized evidence of the review. This may affect the readability of the report, which is extensive and long. A risk then, is to get a good and reliable grip of the extensive and detailed material in order to inform best practice and future research. To meet this limitation, we are planning to create a web page for dissemination and communication of the scoping review to a broader audience. Another limitation was the quite heterogenous data material, with a broad range of research designs, methodological assumptions, and research paradigms. To synthesize, compare, and aggregate the findings was challenging across such heterogenous research material and it also challenged the research team's range of competence and experience.

# Conclusion

The purpose of this scoping review was to identify and analyze the trends of the available research themes, methods, populations, and evidence within the REDE related topics of a) teaching and learning in dance and b) dance and mental health.

In the examination of how research was conducted, it was clear that the research within the two main topics of pedagogy and dance science were methodologically heterogeneous and positioned within quite different methodological research paradigms, affecting both the research quality and the applicability of the research. More methodological rigor and systematic approach is needed in dance research, especially within the field of pedagogical and practice-based dance research. Additionally, more studies on professional, mature, and retired dancers, as well as more applied quality research integrating theory and practice are warranted.

The scoping review identified three main themes in the topic of teaching and learning in dance: dance culture, learning-process, and being. A key finding in the first theme, dance culture, showed that dance practice is highly cultural constituted, affected by the worldviews of the two main teaching paradigms of traditionalism and progressivism, implicitly influencing the assumptions, beliefs, structures, power relations, ethics, aesthetics, and behavior of the dance teachers, dance students, and dancers.

These overarching paradigms in the dance culture set important frameworks of teaching and learning in dance. On the one hand - a mainly teacher-centered learning process in line with the more traditional, individualized, and authoritarian conservatoire model; on the other hand - a student-centered model based on more democratic, authoritative, and collaborative was of learning. The latter was proved to be more beneficial in relation to the third

theme of *being*, since it seemed to nurture enhanced motivation, enjoyment, achievements, health, and well-being.

Considering the second topic, dance and mental health, the scoping review identified two main themes: stressors and coping with stressors. A set of stressors exist as determinants related to mental health (i.e., cultural, interpersonal, environmental, situational, and personal), affecting the mental health of dance students, dancers, and dance teachers. A key finding was that tradition is running deep in the dance culture, and that stressors such as cultural, interpersonal, and environmental are mainly culturally embedded, which link the review's first topic of teaching and learning in dance directly to the topic of dance and mental health. Another key finding was the identification of a range of personal stressors that revealed the dance students and dancers themselves, in many cases, were their own worst enemy, adding a lot of pressure from within in addition to contextual and external stressors.

In light of the second identified theme in the thematic analysis of dance and mental health, coping with stressors, the scoping review identified some important general coping variables such as motivational quality, creativity, and emotional intelligence, which seemed important either for the development or the promotion of coping strategies and coping processes when faced with a range of different stressors. Key findings were that adaptive coping is linked with agency, autonomy, meaning and purpose, as well as social support, care, and student-centered teaching and learning. On the other side, maladaptive coping is related to external control, performance orientation, contingent self-worth, stress, pressure, anxiety, and risk behaviors such as perfectionism, obsessiveness, and overtraining.

A key conclusion is the evidence-based need for a paradigm shift into more student-centered teaching and learning . We found signs of this through the following —

- a growing interest in practice-based action research interventions,
- case-studies testing out new strategies
- embodied somatic learning
- skill acquisition
- enquiry-based and student-centered learning
- agency
- co-production in performance
- enhancement of 21st century skills of critical thinking, creativity, communication, and collaboration.

However, we are questioning if these studies and examples are indeed representing the 'few eager and progressive' instead of 'the many' in the field of dance. That's because the evidence identified many instances of conservatoire-style dance teaching still employing the traditionally utilized hierarchical, teacherled and authoritarian approach where the student must conform to the ideal requirements of the tradition, culture, identity-roles and ways of teaching and learning.

Also, evidence from research on dance students', dancers' health and well-being underpin many occupational hazards and some ethical challenges, which highlight that the pedagogical change is not that reflected in parallel outcome data.

Performance culture and teaching paradigms are controllable and changeable, and hence,

teacher education in dance is key, which should be evidence-based and about more than syllabus and dance-technical methodology. Also, another key could be to have more research-based pilot projects and practice-based interventions from 'within' to aid the implementation process and learn from best practice.

In light of the research gaps identified by this review, we suggest that future research agendas should focus on heightening methodological research quality within the field of dance pedagogy.

This would entail developing new and sound applied research designs that link experience-based and evidence-based knowledge together while systematically targeting identified knowledge gaps.

# List of included references in the REDE scoping Review

Aalten, A. (2005). We dance we don't live'. Biographical research in dance studies. Discourses in Dance, 3(1), 5-19.

Adame, D. D., Radell, S. A., Johnson, T. C., & Cole, S. P. (1991). Physical fitness, body image, and locus of control in college women dancers and nondancers. *Perceptual and motor skills*, 72(1), 91-95.

Alexias, G., & Dimitropoulou, E. (2011). The body as a tool: Professional classical ballet dancers' embodiment. *Research in Dance Education*, *12*(2), 87-104.

Alterowitz, G. (2014). Toward a feminist ballet pedagogy: Teaching strategies for ballet technique classes in the twenty-first century. Journal of Dance Education, 14(1), 8-17.

Andersen, H. (2018). Somatics, Transfer Theory, and Learning: Six Case Studies. Journal of Dance Education, 18(4), 164-175.

Andresen, J. V. E. (2011). Embodied knowledge in high-school dance students; communicating the bodily experience (Master's thesis, Norges teknisk-naturvitenskapelige universitet, Det humanistiske fakultet, Institutt for musikk).

Andersson, N. (2016). Teacher's conceptions of quality in dance education expressed through grade conferences. Journal of Pedagogy, 7(2), 11-32.

Andrzejewski, C. E. (2008). A holistic investigation of teacher identity, knowledge, and practice (Doctoral dissertation, The Ohio State University).

Andrzejewski, C. E., Wilson, A. M., & Henry, D. J. (2013). Considering motivation, goals, and mastery orientation in dance technique. Research in Dance Education, 14(2), 162-175.

Aujla, I. J., Nordin-Bates, S. M., Redding, E., & Jobbins, V. (2014). Developing talent among young dancers: Findings from the UK Centres for Advanced Training. *Theatre, dance and performance training*, *5*(1), 15-30.

Aujla, I. J., Nordin-Bates, S., & Redding, E. (2014). A qualitative investigation of commitment to dance: findings from the UK Centres for Advanced Training. *Research in dance education*, *15*(2), 138-160.

Aujla, I. J., Nordin-Bates, S. M., & Redding, E. (2015). Multidisciplinary predictors of adherence to contemporary dance training: findings from the UK Centres for Advanced Training. *Journal of sports sciences*, 33(15), 1564-1573.

Archinard, M., & Scherer, U. (1995). Training in classical dance in childhood and adolescence: What influence on bulimia nervosa in adult patients?. *European Eating Disorders Review*, 3(2), 111-116.

Assandri, E. P. (2019). Is 'touching'essential when teaching ballet?. Research in Dance Education, 20(2), 197-207.

Backlund, H., & Wallén, F. (2016). Preprofessionella balettdansares upplevelser och erfarenheter av dansrelaterade skador.

Batur, S., Kabakci, E., & Gulol, C. (2003). Maladaptive eating attitudes of elite and amateur Turkish dancers: are they at risk?. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 8(4), 263-267.

Benn, T., & Walters, D. (2001). Between Scylla and Charybdis. Nutritional education versus body culture and the ballet aesthetic: The effects on the lives of female dancers. *Research in dance education*, *2*(2), 139-154.

Bennett, D. (2009). Careers in dance: Beyond performance to the real world of work. *Journal of Dance Education*, *9*(1), 27-34.

Berg, T. (2017). Ballet as Somatic Practice: A Case Study Exploring the Integration of Somatic Practices in Ballet Pedagogy. Journal of Dance Education, 17(4), 147-157.

Bibik, J. M. (1993). Pedagogical considerations regarding perceptions of dance competence. Journal of teaching in physical education, 12(3), 266-285.

Bibik, J. M. (1996). Differential treatment of whole classes by a university dance teacher. Sport, Education and Society, 1(2), 215-225.

Blevins, P., Erskine, S., Hopper, L., & Moyle, G. (2020). Finding Your Balance: An Investigation of Recovery–Stress Balance in Vocational Dance Training. *Journal of Dance Education*, 20(1), 12-22.

Blevins, P., Erskine, S., Moyle, G., & Hopper, L. (2020). Student and teacher attitudes towards overtraining and recovery in vocational dance training. *Theatre, Dance and Performance Training*, 11(1), 5-24.

Bolles, G., & Chatfield, S. J. (2009). The intersection of imagery ability, imagery use, and learning style: an exploratory study. Journal of Dance Education, 9(1), 6-16.

Bonbright, J. M. (1995). Discriminating physiological, behavioral and psychological characteristics in eating disorders: Clinical and psychometric comparisons between clinically diagnosed patients, ballet dancers and controls (Doctoral dissertation, Temple University).

Bottamini, G. L. (2000). *Ballet teachers: A source of perceived weight loss pressure in female ballet students*. University of Ottawa (Canada).

Cahalan, R., Comber, L., Gaire, D., Quin, E., Redding, E., Ni Bhriain, O., & O'sullivan, K. (2019). Biopsychosocial characteristics of contemporary and Irish University-level student dancers a pilot study. *Journal of Dance Medicine & Science*, 23(2), 63-71.

Cairns, C. J. 2010. "In Pursuit of Excellence: Uncovering the Knowledge, Philosophies, and Expert Practice of the Classical Ballet Master." PhD diss., University of Canterbury.

Carattini, C. M. (2020). Psychological skills in ballet training: An approach to pedagogy for the fulfilment of student potential (Doctoral dissertation, Queensland University of Technology).

Carr, S., & Wyon, M. (2003). The impact of motivational climate on dance students' achievement goals, trait anxiety, and perfectionism. *Journal of Dance Medicine & Science*, 7(4), 105-114.

Choi, E., and N. Y. Kim. 2015. "Whole Ballet Education: Exploring Direct and Indirect Teaching Methods." Research in Dance Education 16 (2): 142–160.10.1080/14647893.2014.950643

Chen, F., Lui, A. M., Andrade, H., Valle, C., & Mir, H. (2017). Criteria-referenced formative assessment in the arts. Educational

Assessment, Evaluation and Accountability, 29(3), 297-314.

Chua, J. (2014). Dance talent development across the lifespan: A review of current research. Research in Dance Education, 15(1), 23-53.

Chua, J. (2015). The role of social support in dance talent development. Journal for the Education of the Gifted, 38(2), 169-195.

Chua, J. (2017). The influences of an exemplary ballet teacher on students' motivation: The Finnish Way'. Research in Dance Education, 18(1), 3-22.

Clegg, H., Owton, H., & Allen-Collinson, J. (2018). Challenging conceptions of gender: UK dance teachers' perceptions of boys and girls in the ballet studio. Research in Dance Education, 19(2), 128-139.

Clegg, H., Owton, H., & Allen-Collinson, J. (2019). Attracting and retaining boys in ballet: A qualitative study of female dance teachers. Journal of Dance Education, 19(4), 158-167.

Clements, L., & Nordin-Bates, S. M. (2020). Inspired or Inhibited? Choreographers' Views on How Classical Ballet Training Shaped Their Creativity. *Journal of Dance Education*, 1-12.

Cuellar-Moreno, M., & Caballero-Juliá, D. (2019). Student perceptions regarding the command and problem solving teaching styles in the dance teaching and learning process. Research in Dance Education, 20(3), 297-310.

Critien, N., & Ollis, S. (2006). Multiple engagement of self in the development of talent in professional dancers. *Research in Dance Education*, 7(2), 179-200.

Dantas, A. G., Alonso, D. A., Sánchez-Miguel, P. A., & del Río Sánchez, C. (2018). Factors dancers associate with their body dissatisfaction. *Body image*, *25*, 40-47.

Dearborn, K., Harring, K., Young, C., & O'Rourke, E. (2006). Mirror and phrase difficulty influence dancer attention and body satisfaction. *Journal of Dance Education*, *6*(4), 116-123.

de las Heras Fernández, R., Espada Mateos, M., Carrascal Dominguez, S., & Garcia Coll, V. (2020). Evaluation and analysis of emotional intelligence, mood and coping strategies in two Spanish dance companies. *Research in Dance Education*, 21(3), 231-244.

Diaz, H., Chatfield, S. J., & Cox, J. (2008). Cultivating Presence in Movement: Student Refections on the Practice of Feldenkrais Awareness Through Movement® in Dance Training. *Journal of Dance Education*, 8(3), 79-93.

Demelius, Y. (2003). Steps of a dance production: the working lives of professionals at a dance company (Doctoral dissertation, Concordia University).

Downs, S. V. C. (2013). Coping and injury in a professional ballet company: an investigation of stressors, appraisal, coping processes and injury in professional ballet dancers (Doctoral dissertation, University of Birmingham).

Dolva, A. (2012). Dans og disiplin-en undersøkelse om hva danselærere tenker om fenomenet disiplin (Master's thesis, NTNU).

Dragon, D. A. (2015). Creating cultures of teaching and learning: Conveying dance and somatic education pedagogy. Journal

of Dance Education, 15(1), 25-32.theory-based

Duffy, A. (2020). Teaching Dance Techniques in an Aging Body: Perspectives and Recommendations from Dance Educators. Journal of Dance Education, 1-10.

Duffy, A. B., & Beaty, A. (2019). Flexibility of artistic roles and shared ownership between dance educators and students in choreography and performance. Research in Dance Education, 20(2), 130-147.

Dryburgh A. & Fortin S. (2010): Weighing in on surveillance: perception of the impact of surveillance on female ballet dancers' health, *Research in Dance Education*, *Volume 1*, *number 2* 

Englund, B., & Sandstrom, B. (2015). 'Expression' and verbal expression: on communication in an upper secondary dance class. *Research in Dance Education*, 16(3), 213-229.

Fietze, I., Strauch, J., Holzhausen, M., Glos, M., Theobald, C., Lehnkering, H., & Penzel, T. (2009). Sleep quality in professional ballet dancers. *Chronobiology international*, *26*(6), 1249-1262.

Fitz, A. I. (1999). An examination of the institution of ballet and its role in constructing a representation of femininity. University of Alberta.

Flower, L. (2019). Spiritual experiences of post-performance career ballet dancers: a qualitative study of how peak performance spiritual lived experiences continued into and influenced later teaching lives. Research in Dance Education, 20(2), 184-196

Fortin, S., Long, W., & Lord, M. (2002). Three voices: Researching how somatic education informs contemporary dance technique classes. Research in dance education, 3(2), 155-179.

Gittens, C. Y. (2012). A comparative study: Perfectionism in elite ballet dancers and artistic gymnasts (Doctoral dissertation, University of Birmingham).

Green, J. 1999. Somatic authority and the myth of the ideal body in dance education. Dance Research Journal, 31(2): 80–100.

Green,J. 2000. Emancipatory pedagogy?: Women's bodies and the creative process in dance. Frontiers: A Journal of Women Studies, 21(3): 124–140.

Green, J. 2003. Foucault and the training of docile bodies in dance education. Arts and Learning Research, 19(1): 99–126.

Gruzelier, J. H., Thompson, T., Redding, E., Brandt, R., & Steffert, T. (2014). Application of alpha/theta neurofeedback and heart rate variability training to young contemporary dancers: State anxiety and creativity. *International Journal of Psychophysiology*, *93*(1), 105-111.

Haines, S., & Torres, T. (2016). So we think you can learn: how student perceptions affect learning. Research in Dance Education, 17(3), 147-160.

Haltom, T. M., & Worthen, M. G. (2014). Male ballet dancers and their performances of heteromasculinity. *Journal of College Student Development*, *55*(8), 757-778.

Hamilton L.; Hamilton, W.G.; Warren, M.P.; Keller, K. and Molnar, M. (1997): Factors contributing to the attrition rate in elite ballet students. *Journal of Dance Medicine and Science, Volume 1, number 4.* 

Hancox, J. E., Quested, E., Ntoumanis, N., & Duda, J. L. (2017). Teacher-created social environment, basic psychological needs, and dancers' affective states during class: A diary study. *Personality and Individual Differences*, *115*, 137-143.

Hancox, J. E. (2014). Examination of the social-environmental and motivational processes operating in dance contexts: a self-determination theory approach (Doctoral dissertation, University of Birmingham).

Haraldsen, H. M., Abrahamsen, F. E., Solstad, B. E., & Halvari, H. (2021). Narrative Tensions in Strained Junior Elite Performers' Experiences of Becoming Elite Performers. Frontiers in Psychology, 12, 1767.

Haraldsen, H. M., Halvari, H., Solstad, B. E., Abrahamsen, F. E., & Nordin-Bates, S. M. (2019). The role of perfectionism and controlling conditions in Norwegian elite junior performers' motivational processes. Frontiers in psychology, 10, 1366.

Haraldsen, H. M., Nordin-Bates, S. M., Abrahamsen, F. E., & Halvari, H. (2020). Thriving, Striving, or Just Surviving? TD Learning Conditions, Motivational Processes and Well-Being Among Norwegian Elite Performers in Music, Ballet, and Sport. Roeper Review, 42(2), 109-125. Haraldsen, H. M., Solstad, B. E., Ivarsson, A., Halvari, H., & Abrahamsen, F. E. (2020). Change in basic need frustration in relation to perfectionism, anxiety, and performance in elite junior performers. Scandinavian journal of medicine & science in sports, 30(4), 754-765.

Harding, M. (2012). Assessment in the high school technique class: Creating

thinking dancers. Journal of Dance Education, 12(3), 93-98.slett pga. Lav forskningskvalitet, egentlig praksisrefleksjon

Harper, S. (2012). A critical comparative study of career transition policy, practice and experiences for ballet company dancers and musical theatre independent dancers (Doctoral dissertation, University of Birmingham).

Harrington, H. (2020). Consumer dance identity: the intersection between competition dance, televised dance shows and social media. Research in Dance Education, 21(2), 169-187. Theory /others' research-based, not empirical

Hefferon, K. M., & Ollis, S. (2006). 'Just clicks': an interpretive phenomenological analysis of professional dancers' experience of flow. Research in Dance Education, 7(2), 141-159.

Heiland, T. L., Murray, D. S., & Edley, P. P. (2008). Body image of dancers in Los Angeles: the cult of slenderness and media influence among dance students. *Research in Dance Education*, *9*(3), 257-275.

Hellem, T. S. (2017). Relasjoner mellom lærer og elev ved danselinja-En kvalitativ intervjustudie om betydningen av lærerelev-relasjoner sett fra dansepedagogens perspektiv (Master's thesis, NTNU).

Higdon, R. D., & Stevens, J. (2017). Redefining employability: student voices mapping their dance journeys and futures. Research in Dance Education, 18(3), 301-320.

Hoffer, D. L. (1981). *The classical ballet dancer: a psycho-social analysis of the dance personality profile*. Nova University.

Hopper, L. S., Blevins, P., Erskine, S., Hendry, D., Hill, R., & Longbottom, R. (2020).

Sustaining dancer wellbeing through independent professional dance careers. *Theatre, Dance and Performance Training,* 11(4), 470-486.

Hrušová, D. (2015). Effect of dancing on subjective experiences and psychological state of dancers.

Huddy, A., & Stevens, K. (2014). Dance teaching and learning in context: Activating the head, heart and hands. Brolga: an Australian Journal about Dance, 39, 20-26.

Hutchinson, C. U., Sachs-Ericsson, N. J., & Ericsson, K. A. (2013). Generalizable aspects of the development of expertise in ballet across countries and cultures: A perspective from the expert-performance approach. High Ability Studies, 24(1), 21-47.

Karin, J., & Nordin-Bates, S. M. (2020). Enhancing Creativity and Managing Perfectionism in Dancers Through Implicit Learning and Sensori-Kinetic Imagery. *Journal of Dance Education*, 20(1), 1-11.

Kartawidjaja, J. E., & Cordero, E. D. (2013). Fat talk and body dissatisfaction among college dancers. *Journal of Dance Education*, *13*(4), 122-129.

Keinanen, M. O. (2003). Two styles of mentoring: A comparison of vertical and horizontal mentoring in dance. Harvard University.

Kenny, S. J., Palacios-Derflingher, L., Shi, Q., Whittaker, J. L., & Emery, C. A. (2019). Association between previous injury and risk factors for future injury in preprofessional ballet and contemporary dancers. *Clinical journal of sport medicine*, *29*(3), 209-217.

Kerr, J. H., Fujiyama, H., Wilson, G. V., & Nakamori, K. (2006). The experience of a

modern dance group: arousal, motivation, and self-rated performance. *Research in Dance Education*, 7(2), 125-140.

Khudaverdian, C. (1998). The dancing body (Doctoral dissertation, Concordia University).

Kim, H., Tasker, S. L., & Shen, Y. (2020). How to persevere in a ballet performance career: exploring personal wisdom of retired professional ballet dancers. *Research* in Dance Education, 1-26.

Klockare, E., Gustafsson, H., & Nordin-Bates, S. M. (2011). An interpretative phenomenological analysis of how professional dance teachers implement psychological skills training in practice. *Research in dance education*, 12(3), 277-293.

Kosmidou, E., Giannitsopoulou, E., & Moysidou, D. (2017). Social Physique Anxiety and pressure to be thin in adolescent ballet dancers, rhythmic gymnastics and swimming athletes. *Research in Dance Education*, 18(1), 23-33.

Kushida, M. A. (2017). The Environment and Identity Processes: The Dancer Identity as a Case Study (Doctoral dissertation, UC Riverside).

Kveton-Bohnert, L. A. (2017). The Voices of Classical Ballet Dancers: Alleviating Maladaptive Perfectionism through Resilience, Mindful Learning, and Self-Compassion (Doctoral dissertation, Saybrook University).

Lacaille, N., Koestner, R., & Gaudreau, P. (2007). On the value of intrinsic rather than traditional achievement goals for performing artists: A short-term prospective study. *International Journal of Music Education*, 25(3), 245-257.

Lakes, R. (2005). The messages behind the methods: The authoritarian pedagogical legacy in western concert dance technique training and rehearsals. Arts Education Policy Review, 106(5), 3-20.

Larsen, P. I. (2015). «Hva kjennetegner dans i videregående skole?»-En analyse av fagenes kunnskap, pedagogikk og praksis (Master's thesis, NTNU).

Leijen, Ä., Lam, I., Simons, P. R. J., & Wildschut, L. (2008). Pedagogical practices of reflection in tertiary dance education. European physical education review, 14(2), 223-241.

Leijen, Ä., Lam, I., Wildschut, L., & Simons, P. R. J. (2009). Difficulties teachers report about students' reflection: Lessons learned from dance education. Teaching in Higher Education, 14(3), 315-326.

Leijen, Ä., & Sööt, A. (2016). Supporting pre-service dance teachers' reflection with different reflection procedures. Research in Dance Education, 17(3), 176-188.

Leijen, Ä., Valtna, K., Leijen, D. A., & Pedaste, M. (2012). How to determine the quality of students' reflections?. Studies in Higher Education, 37(2), 203-217.

Li, Z. (2011). Adolescent males in dance: A closer look at their journey. *Journal of Physical Education, Recreation & Dance,* 82(7), 17-23.

Liederbach, M., & Compagno, J. M. (2001). Psychological aspects of fatigue-related injuries in dancers. *Journal of Dance Medicine & Science*, *5*(4), 116-120.

Lin, Y. N., Hsia, L. H., Sung, M. Y., & Hwang, G. H. (2019). Effects of integrating mobile technology-assisted peer assessment into flipped learning on students'

dance skills and self-efficacy. Interactive Learning Environments, 27(8), 995-1010.

Lindblom, E. (2020). Rethinking Classical Ballet Pedagogy: Examining Advancements that Integrate a Modern Approach.
Lindblom, E. (2020). Rethinking Classical Ballet Pedagogy: Examining Advancements that Integrate a Modern Approach.

Lopez, B. (2019). Dance students at a two year college: making sense of their academic, cultural, and social world. *Research in Dance Education*, 20(2), 174-183.

Macchi, R., & Crossman, J. (1996). After the fall: reflections of injured classical ballet dancers. *Journal of Sport Behavior*, 19(3), 221.

Mainwaring, L., Krasnow, D., & Young, L. (2003). A teacher's guide to helping young dancers cope with psychological aspects of hip injuries. *Journal of dance Education*, *3*(2), 57-64.

May, J., Redding, E., Whatley, S., Łucznik, K., Clements, L., Weber, R., ... & Reed, S. (2020). Enhancing creativity by training metacognitive skills in mental imagery. *Thinking Skills and Creativity*, *38*, 100739.

Minton, S. C. (2001). Assessment of high school dance students' self-esteem. *Journal of Dance Education*, 1(2), 63-73.

Minton, S. C., & Hofmeister, J. (2010). The International Baccalaureate Dance Programme: Learning skills for life in the 21st century. Journal of Dance Education, 10(3), 67-76.

Minton, S., & McGill, K. (1998). A study of the relationships between teacher behaviors and student performance on a spatial kinesthetic awareness test. Dance Research Journal, 30(2), 39-52. Mitchell, S. B., Haase, A. M., & Cumming, S. P. (2021). Of Grit and Grace: Negotiating Puberty, Surviving, and Succeeding in Professional Ballet. *Women in Sport and Physical Activity Journal*, 1(aop), 1-12.

Mitchell, S. B., Haase, A. M., & Cumming, S. P. (2020). Experiences of delayed maturation in female vocational ballet students: An interpretative phenomenological analysis. *Journal of adolescence*, 80, 233-241.

Mitchell, S. B., Haase, A. M., Cumming, S. P., & Malina, R. M. (2017). Understanding growth and maturation in the context of ballet: a biocultural approach. *Research in Dance Education*, 18(3), 291-300.

Morris, G. (2003). Problems with ballet: Steps, style and training. Research in Dance Education, 4(1), 17-30. teoretisk artikkel

Nieminen, P. (1998). Participation motives in relation to background and involvement variables among Finnish non-professional dancers. *Dance Research Journal*, *30*(2), 53-70.

Nieminen, P., Varstala, V., & Manninen, M. (2001). Goal orientation and perceived purposes of dance among Finnish dance students: A pilot study. Research in dance education, 2(2), 175-193.

Nordin-Bates, S. M. (2020). Striving for Perfection or for Creativity? A Dancer's Dilemma. *Journal of dance education*, *20*(1), 23-34.

Nordin-Bates, S. M., Walker, I. J., & Redding, E. (2011). Correlates of disordered eating attitudes among male and female young talented dancers: Findings from the

UK Centres for Advanced Training. *Eating disorders*, 19(3), 211-233.

Nordin-Bates, S. M., Walker, I. J., Baker, J., Garner, J., Hardy, C., Irvine, S. & Blevins, P. (2011). Injury, imagery, and self-esteem in dance healthy minds in injured bodies?. *Journal of Dance Medicine & Science*, 15(2), 76-85.

Nordin-Bates, S. M., Cumming, J., Aways, D., & Sharp, L. (2011). Imagining yourself dancing to perfection? Correlates of perfectionism among ballet and contemporary dancers. *Journal of Clinical Sport Psychology*, *5*(1), 58-76.

Nordin-Bates, S. M., Hill, A. P., Cumming, J., Aujla, I. J., & Redding, E. (2014). A longitudinal examination of the relationship between perfectionism and motivational climate in dance. *Journal of Sport and Exercise Psychology*, *36*(4), 382-391.

Nordgård, A., & Haugland, T. (2014). To læringsperspektiv i jazzdans: Fra formidlingspreget danseundervisning til prosessorientert læringsfokus (Master's thesis, Høgskolen i Oslo og Akershus).

Parker, R. (2011). An exploration of the identity issues faced by retiring male ballet dancers (Doctoral dissertation, University of Birmingham).

Pentith, R., Moss, S., Lamb, K., & Edwards, C. (2020). Perfectionism Among Young Female Competitive Irish Dancers: Prevalence and Relationship with Injury Responses.

Peters, P. J. (2020). Grit for Dance Students: What, Why, and How. *Dance Education in Practice*, 6(1), 7-12.

Petrides, K. V., Niven, L., & Mouskounti, T. (2006). The trait emotional intelligence of

ballet dancers and musicians. *Psicothema*, *18*, 101-107.

Petsilas, P., Leigh, J., Brown, N., & Blackburn, C. (2020). Creative and embodied methods to teach reflections and support students' learning. In Dance, Professional Practice, and the Workplace (pp. 47-66). Routledge.

Pickard, A. (2013). Ballet body belief: Perceptions of an ideal ballet body from young ballet dancers. *Research in Dance Education*, 14(1), 3-19.

Pickard, A., & Bailey, R. (2009). Crystallising experiences among young elite dancers. *Sport, Education and Society*, *14*(2), 165-181.

Pickard, A. (2012). Schooling the dancer: The evolution of an identity as a ballet dancer. Research in Dance Education, 13(1), 25-46.

Polasek, K. M., & Roper, E. A. (2011). Negotiating the gay male stereotype in ballet and modern dance. *Research in Dance Education*, 12(2), 173-193.

Pollatou, E., Bakali, N., Theodorakis, Y., & Goudas, M. (2010). Body image in female professional and amateur dancers. *Research in Dance Education*, *11*(2), 131-137.

Pollitt, E. E., & Hutt, K. (2021). Viewing Injury in Dancers from a Psychological Perspective-A Literature Review. *Journal of Dance Medicine & Science*, 25(2), 75-79.

Puddu, C. (1998). The relationship between stress and eating attitudes and behaviour in female dancers and field hockey players.

Quested, E., & Duda, J. L. (2009). Perceptions of the motivational climate, need

satisfaction, and indices of well-and ill-being among hip hop dancers. *Journal of Dance Medicine & Science*, 13(1), 10-19.

- 67. Risner, D. (2000). Making dance, making sense: Epistemology and choreography. Research in dance education, 1(2), 155-172.
- 68. Ritchie, A., & Brooker, F. (2019). Democratic and Feminist Pedagogy in the Ballet Technique Class: Using a Somatic Imagery Tool to Support Learning and Teaching of Ballet in Higher Education. Journal of Dance Education, 1-8.
- 69. Roche, J., & Huddy, A. (2015). Creative adaptations: integrating Feldenkrais principles in contemporary dance technique to facilitate the transition into tertiary dance education. Theatre, Dance and Performance Training, 6(2), 145-158.
- 70. Rothmund, I. V. (2019). Å gjøre dansen til sin: Bachelorstudenters levde erfaringer i moderne-og samtidsdans (Doctoral dissertation, Institutionen för kultur och estetik, Stockholms universitet).
- 71. Rowe, N., & Xiong, X. (2020). Cut-Paste-Repeat? The maintenance of authoritarian pedagogies through tertiary dance education in China. Theatre, Dance and Performance Training, 1-17.

Radell, S. A., Adame, D. D., & Cole, S. P. (2004). The impact of mirrors on body image and classroom performance in female college ballet dancers. *Journal of Dance Medicine & Science*, 8(2), 47-52.

Radell, S. A., Keneman, M. L., Adame, D. D., & Cole, S. P. (2014). My body and its reflection: a case study of eight dance students and the mirror in the ballet classroom. *Research in Dance Education*, *15*(2), 161-178.

Rafferty, S., & Wyon, M. (2006). Leader-ship behavior in dance application of the

leadership scale for sports to dance technique teaching. Journal of Dance Medicine & Science, 10(1-2), 6-13.

Redding, E., & Quested, E. (2006). When Art Meets Science. *International Journal of Learning*, 13(7).

Reis, N. M., Cardoso, A. A., de Araújo, C. R., Moratelli, J., Boing, L., Borgatto, A. F., & de Azevedo Guimarães, A. C. (2019). Quality of life is associated with fatigue among Brazilian professional dancers. *Motricidade*, *15*(1), 33-38.

Rimmer, R. (2017). Negotiating the rules of engagement: exploring perceptions of dance technique learning through Bourdieu's concept of 'doxa'. Research in Dance Education, 18(3), 221-236.

Ribeiro, M. M., & Fonseca, A. (2011). The empathy and the structuring sharing modes of movement sequences in the improvisation of contemporary dance. Research in Dance Education, 12(2), 71-85.

Risner, D. (2002). Sexual orientation and male participation in dance education: Revisiting the open secret. Journal of Dance Education, 2(3), 84-92.

Risner, D. (2000). Making dance, making sense: Epistemology and choreography. Research in dance education, 1(2), 155-172.

Risner, D. (2014). Bullying victimisation and social support of adolescent male dance students: an analysis of findings. *Research in Dance Education*, 15(2), 179-201.

Roche, J., & Huddy, A. (2015). Creative adaptations: integrating Feldenkrais principles in contemporary dance technique to facilitate the transition into tertiary dance

education. Theatre, Dance and Performance Training, 6(2), 145-158.

Rodrigues, F. R., e Cunha, M. P., Castanheira, F., Bal, P. M., & Jansen, P. G. (2020). Person-job fit across the work lifespan—The case of classical ballet dancers. *Journal of Vocational Behavior*, *118*, 103400.

Rothmund, I. V. (2019). Å gjøre dansen til sin: Bachelorstudenters levde erfaringer i moderne-og samtidsdans (Doctoral dissertation, Institutionen för kultur och estetik, Stockholms universitet).

Rowe, N., & Xiong, X. (2020). Cut-Paste-Repeat? The maintenance of authoritarian pedagogies through tertiary dance education in China. Theatre, Dance and Performance Training, 1-17.

Sanchez, E. N., Aujla, I. J., & Nordin-Bates, S. (2013). Cultural background variables in dance talent development: findings from the UK centres for advanced training. *Research in Dance Education*, 14(3), 260-278.

Schluger, A. E. (2010). Disordered eating attitudes and behaviors in female college dance students: Comparison of modern dance and ballet dance majors. *North American Journal of Psychology*, 12(1), 117-128.

Schupp, K. (2011). Informed decisions: Dance improvisation and responsible citizenship. Journal of Dance Education, 11(1), 22-29.

Seago, C. (2020). A study of the perception and use of attention in undergraduate dance training classes. Research in Dance Education, 21(3), 245-261.

Senning, C. B. (2020). A Study on the Confluence of Resilience Skill Building and Contact Improvisation on Collegiate Dancers (Doctoral dissertation, UC Irvine).

Sims, M., & Erwin, H. (2012). A set of descriptive case studies of four dance faculty members' pedagogical practices. Journal of Dance Education, 12(4), 131-140.

Skaardal, E. (2006). Kroppen som middel og symbol: en kvalitativ studie av unge jenters bearbeidelse av prestasjoner og kroppsidealer i dansen (Master's thesis).

Slater, A., & Tiggemann, M. (2002). A test of objectification theory in adolescent girls. *Sex Roles*, *46*(9), 343-349.

Solomon, R., Solomon, J., Micheli, L. J., Saunders, J. J., & Zurakowski, D. (2002). Using the test of attentional and interpersonal style (TAIS) for profiling and counseling dancers. *Journal of Dance Medicine & Science*, 6(4), 119-127.

Spadafora, A. (2010). Predictors of eating pathology in adolescents: a comparison of ballet dancers and non-dancers.

Spohn, C., & Spickard Prettyman, S. (2012). Moving is like making out: Developing female university dancers' ballet technique and expression through the use of metaphor. Research in Dance Education, 13(1), 47-65.

Stanway, A. R., Fein, E. C., & Bordia, S. (2020). The moderating role of conscientiousness between psychological contract breach and loyal boosterism. *Research in Dance Education*, *21*(1), 82-97.

Stracciolini, A., Stein, C. J., Kinney, S., McCrystal, T., Pepin, M. J., & Meehan III, W. P. (2017). Associations between sedentary behaviors, sleep patterns, and BMI in

young dancers attending a summer intensive dance training program. *Journal of Dance Medicine & Science*, 21(3), 102-108.

Stornæs, A. V., Rosenvinge, J. H., Sundgot-Borgen, J., Pettersen, G., & Friborg, O. (2019). Profiles of perfectionism among adolescents attending specialized eliteand ordinary lower secondary schools: A Norwegian cross-sectional comparative study. *Frontiers in psychology*, 10, 2039

Swami, V., & Harris, A. S. (2012). Dancing toward positive body image? Examining body-related constructs with ballet and contemporary dancers at different levels. *American Journal of Dance Therapy*, *34*(1), 39-52.

Tsompanaki, E., & Benn, T. (2011). Dance students' perceptions of tertiary education in England and in Greece. Research in Dance Education, 12(3), 203-219.

Tvedt, M. S. (2011). Danseelevers målorientering og opplevelse av det motivasjonelle klima i relasjon til selvoppfatning og emosjonelle problem (Master's thesis, University of Stavanger, Norway).

Van Rossum, J. H. (2004). The dance teacher: The ideal case and daily reality. Journal for the Education of the Gifted, 28(1), 36-55.

van Staden, A., Myburgh, C. P., & Poggenpoel, M. (2009). A psycho-educational model to enhance the self-development and mental health of classical dancers. *Journal of Dance Medicine & Science*, 13(1), 20-28.

van Winden, D., van Rijn, R. M., Savelsbergh, G. J., Oudejans, R. R., & Stubbe, J. H. (2020). Limited Coping Skills, Young Age, and High BMI Are Risk Factors for Injuries in Contemporary Dance: A 1-Year

Prospective Study. *Frontiers in Psychology*, 11, 1452.

Van Zelst, L., Clabaugh, A., & Morling, B. (2004). Dancers' Body Esteem, Fitness Esteem, and Self-esteem in Three Contexts. *Journal of Dance Education*, *4*(2), 48-57.

Wainwright, S. P., Williams, C., & Turner, B. S. (2006). Varieties of habitus and the embodiment of ballet. Qualitative research, 6(4), 535-558.

Walker, I. J., Nordin-Bates, S. M., & Redding, E. (2012). A mixed methods investigation of dropout among talented young dancers: Findings from the UK Centres for Advanced Training. *Journal of Dance Medicine & Science*, 16(2), 65-73.

Walker, I. J., Nordin-Bates, S. M., & Redding, E. (2011). Characteristics of talented dancers and age group differences: findings from the UK Centres for Advanced Training. High Ability Studies, 22(1), 43-60.

Walker, I. J., Nordin-Bates, S. M., & Redding, E. (2010). Talent identification and development in dance: A review of the literature. Research in Dance Education, 11(3), 167-191.

Walter, O., & Yanko, S. (2018). New observations on the influence of dance on body image and development of eating disorders. *Research in Dance Education*, 19(3), 240-251.

Wanke, E. M., Schmidt, M., Leslie-Spinks, J., Fischer, A., & Groneberg, D. A. (2015). Physical and mental workloads in professional dance teachers. *Medical problems of performing artists*, *30*(1), 54-60

Watson, D. E., Nordin-Bates, S. M., & Chappell, K. A. (2012). Facilitating and nurturing creativity in pre-vocational dancers: Findings from the UK Centres for Advanced Training. *Research in Dance Education*, 13(2), 153-173.

Warburton\*, E. C. (2004). Knowing what it takes: The effect of perceived learner advantages on dance teachers' use of critical-thinking activities. Research in Dance Education, 5(1), 69-82.

Weber, R. (2009). Integrating semi-structured somatic practices and contemporary dance technique training. Journal of Dance & Somatic Practices, 1(2), 237-254.

Wenn, B., Mulholland, R., Timmons, W., & Zanker, Y. (2018). Towards a developing construct in dance education—exploring the relation of emotional intelligence to teacher's sense of efficacy and teaching experience among dance education student teachers in the United Kingdom. *Research in Dance Education*, 19(1), 14-38.

Østern, T. P. (2017). Norske samtidsdansutdanninger i spennet mellom modernisme og postmodernisme-tidligere dansestudenters refleksjoner over påvirkningen av en danseutdanning.

Østern, T. P., & Irgens, E. J. (2018). Interfering with the lived field of dance pedagogy from organizational and leadership studies perspectives—an explorative intervention with performing and teaching dance artists. Research in Dance Education, 19(1), 57-73.