

Stress and Injury Risk in Professional Ballet Dancers

A Qualitative Study

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Examiner Dr. phil. Vanessa Wergin
Chair of Sport Psychology

M.Sc. Wiebke Hähl
Chair of Sport Psychology

Submitted by B.Sc. Anja Ofenstein
Planegger Str. 47g
81241 München
Matriculation Number 03654632

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Abstract

Professional ballet dancers report high injury rates, but research about potential risk factors and prevention strategies is sparse. While stress is recognized as a major injury risk factor in other sports, little is known about its influence on injuries in professional ballet. This study investigated in a qualitative approach whether an existing model about stress and injury is suitable to predict and prevent injuries in professional ballet. Two professional ballet dancers (f=1, m=1) were interviewed about the occurrence of their recently sustained overuse injuries and potential influencing factors. Four main themes were identified using thematic analysis: psychophysiological factors, history of stressors, personal factors, and coping resources. Fatigue was described as the underlying injury mechanism, which was influenced by various stressors inside and outside of ballet, personality traits, and ineffective coping. The results are discussed in relation to the model and existing dance research to give recommendations for future screening and intervention programs for professional ballet dancers.

Keywords: stress, injury, professional ballet dancers, qualitative research

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Introduction

Ballet has always fascinated spectators by combining artistry and athletic performance into aesthetic movements full of elegance, harmony, and grace. This ease of movements that ballet dancers present to us on stage often lets us forget how many demanding hours of physical and mental work are necessary to create this illusion. However, their work comes at a high price: professional ballet dancers are at a high risk of getting injured during their career.

Professional ballet dancers report between 1.1 (Ramkumar, Farber, Arnouk, Varner, & McCulloch, 2016) and 6.8 injuries per dancer every year (Allen, Nevill, Brooks, Koutedakis, & Wyon, 2012). This accounts for up to 4.4 injuries per 1000h of dance (*ibid.*) with lower extremities, especially foot and ankle, and lower back being the most affected injury sites (e.g., Jacobs, Hincapie, & Cassidy, 2012; Cardoso et al., 2017). Up to 75% of these injuries are overuse injuries, primarily caused by the technical requirements and repetitive movement patterns in ballet dance (Sobrino & Guillen, 2017). Even though the time taken off from dancing is shorter for overuse than traumatic injuries (Female: 3 vs. 6 days, Male: 9 vs. 10 days; Allen et al., 2012), we must remember that overuse injuries are characterized by a preceding period of pain before dancers have to stop completely due to the actual injury (Sobrino & Guillen, 2017; Anderson & Hanrahan, 2008). Furthermore, the question arises as to the number of unreported cases of injuries since the injury burden is dependent on the definition of injury used. Definitions based on time-loss (i.e., time absent from training) and medical-attention (i.e., seeking help from health care practitioners) tend to underestimate the injury burden compared to self-reporting of physical complaints (Kenny, Palacios-Derflinger, Whittaker, & Emery, 2018). As every single one of these injuries can lead to a replacement in the company or even an early end to the career for the dancer (Allen et al., 2012), it is necessary to understand which factors are influencing the risk of injury.

Dance researchers have been trying to find potential risk factors and prevention strategies to reduce the injury risk for dancers, mainly focusing on biomechanical and training-specific aspects of ballet. Thus, extensive ballet practice and insufficient additional physical training are associated with an increased injury risk (Campoy et al., 2011; Russell, 2013; Gamboa, Roberts, Maring, & Fergus, 2008), whereas only the measurements of functional and compensated turnout ROM appear to be effective prevention tools to identify dancers at risk (Armstrong & Relph, 2018). Nevertheless, the heterogeneity of study designs and the lack of study quality impede the interpretation of results, and therefore, the implementation of uniform measures to improve dancers' health (Kenny, Whittaker, & Emery, 2016; Moita, Nunes, Esteves, Oliveira, & Xarez, 2017).

During recent years, dance researchers have been demanding to change the focus from physiological to psychological factors and how they are affecting dancers' health and performance (Hamilton, Solomon, & Solomon, 2006; Russell, 2013). From basic psychological need satisfaction (see e.g., Quested & Duda, 2011) to passion and perfectionism (see e.g., Padham & Aujla, 2014; Goodwin, Arcelus, Geach, & Meyer, 2014), researchers have shown that psychological factors have the potential to both impair and improve dancers' physical and psychological well-being. But one factor that has so far received little attention as a potential risk factor is stress.

Stress and its influence on illness and injury have been investigated since the 1960s with research mainly being focused on the detrimental effect of stressful life events (Andersen & Williams, 1988; Holmes & Rahe, 1967; Passer & Seese, 1983). In the following years, researchers have expanded stress research by including potentially moderating psychosocial factors, which finally resulted in Andersen and Williams's development of the *theoretical model of stress and*

athletic injury (1988). Andersen and Williams (1988) assume that an athlete with many stressors, personality factors that intensify the stress response, and inadequate coping resources will appraise a potentially stressful athletic situation as more stressful as an athlete with an opposite profile. The resulting physiological and attentional changes, such as increased muscle tension, will expose the athlete to a greater risk of getting injured.

Since its first publication and later modification (Williams & Andersen, 1998), the *stress-injury model* has been supported by research findings in sports, such as track and field, gymnastics, rugby, and soccer (see e.g., Hanson, McCullagh, & Tonymon, 1992; Petrie, 1992; Lavallée & Flint, 1996; Maddison & Prapavessis, 2005; Johnson & Ivarsson, 2011; Ivarsson, Johnson, & Podlog, 2013). However, only a few studies have investigated whether the stress-injury mechanism and the moderating effect of psychosocial factors are applicable to predict and prevent injuries in dance (see e.g., Patterson, Smith, Everett, & Ptacek, 1998; R. Smith, Ptacek, & Patterson, 2000). Noh, Morris, and Andersen (2003) have attempted to apply the *stress-injury model* (Andersen & Williams, 1988) to dance, but due to the limited amount of research available they have not been able to confirm the applicability of all model elements. They conclude that more research, both quantitative and qualitative, is needed to understand the impact and forms of stress in dance, and to design effective intervention strategies to reduce the injury risk for dancers. Since then, a few more studies have investigated single elements of the *stress-injury model* (Andersen & Williams, 1988) but it remains unclear whether the model in its entirety is suitable to explain the stress-injury mechanism in dance.

The aim of the study is to investigate whether the *stress-injury model* by Andersen and Williams (1988) is suitable to predict and prevent injuries in professional ballet. For this, first an overview of the current dance research in relation to the model is presented. Following this, a

qualitative study with formerly injured professional ballet dancers is conducted, using questionnaires and interviews to obtain in-depth and insightful accounts of their experiences. Specifically, the study aims to answer the following research questions: (1) How did the injuries of the ballet dancers occur, and which factors related to stress could have influenced their injuries? (2) How do the dancers' experiences relate to the stress-injury mechanism and moderating psychosocial factors proposed in the *stress-injury model* (Andersen & Williams, 1988)?

Literature Review

Stress-Injury Model

Andersen and Williams (1988) have developed their *stress-injury model* with the idea of combining former stress models into a multi-component, interactional framework that does justice to the complexity of stress and its relationship to injury. The core of the *stress-injury model* is the two-part bidirectional *stress response*, which presents the link between a potentially stressful athletic situation and the injury outcome (Figure 1). Pictured above the stress response are the three moderating variables *history of stressors*, *personality*, and *coping resources*, which either contribute to the stress response directly or indirectly by affecting each other. The last model component *interventions* is separated into two categories focusing on both aspects of the stress response.

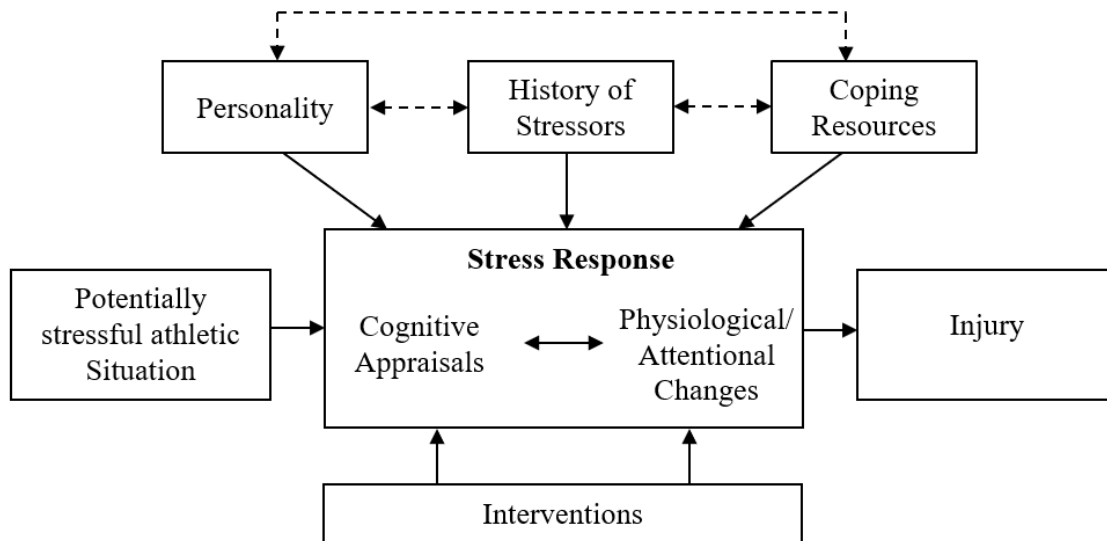


Figure 1. The stress-injury model, later modifications of the model are shown with dotted arrows. Reprinted from 'Psychosocial antecedents of sport injury: Review and critique of the stress and injury model' by J.M. Williams and M.B. Andersen, 1998, *Journal of applied sport psychology*, 10(1), p. 7. Copyright 1998 by Taylor & Francis. Reprinted with permission.

The stress response comprises two processes which influence each other bidirectionally: the *cognitive appraisal* and *physiological and attentional changes*. During the cognitive appraisal, the athlete firstly appraises the demands of the stressful situation, and secondly, assesses whether his resources are sufficient to meet the demands of the stressful situation. If the athlete perceives the demands of the stressful situation to exceed his or her resources, the stress response will be intensified. The extent of the stress response also depends on whether the athlete considers the expected consequences of the stressful situation as essential to his career or self-esteem. The cognitive appraisal of the situation activates the autonomic nervous system to release catecholamines and glucocorticoids, which evoke the physiological and attentional changes of the stress response (Appaneal & Perna, 2014). The increased muscle tension and attentional deficits caused by catecholamines and glucocorticoids lead to disturbed motor coordination and reduced

flexibility, as well as to the narrowing of the visual field and prolonged stimulus identification. Andersen and Williams (1988) assume that all these factors contribute to an increased likelihood of injury for the athlete. The physiological and attentional changes, in turn, serve as a feedback mechanism for the continuous (re-)appraisal of the situation and personal resources.

The moderating variable *history of stressors* includes *life events*, *daily hassles*, and *previous injuries*. Life events, meaning major changes in personal or athletic life, have been proven to increase life stress and the injury risk of an athlete even before the development of Andersen and Williams's model (1988; see e.g., Holmes & Rahe, 1967). While there are inconsistent results about the detrimental effect of positive life stress, negative life events, or stress respectively, are clearly associated with increased likelihood of injury (e.g., Vinokur & Selzer, 1975; Passer & Seese, 1983; Hanson et al., 1992). Daily hassles are minor chronic stressors in everyday life that can occur both independently from major life events (e.g., noise, too much work, or not getting enough rest) or because of them (e.g., new surroundings after moving). Some studies have shown that daily hassles have an even stronger impact on health than major life events (Kanner, Coyne, Schaefer, & Lazarus, 1981; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982). Previous injuries of an athlete need to be considered since the probability of a reinjury is increased if the athlete has not completely recovered physically. Furthermore, if the athlete is not mentally prepared to return to training, the negative cognitive appraisal and fear of reinjury might increase the stress response.

Andersen and Williams (1988) have identified five personality factors that are supposed to influence the stress-injury relationship: *hardiness*, *locus of control*, *sense of coherence*, *competitive trait anxiety*, and *achievement motivation*. Variations in these personality traits dispose some athletes to be more resilient in stressful situations, whereas other athletes perceive the same situations as more stressful. Andersen and Williams (1988) have emphasized that this list of

personality factors is not exhaustive but composed of factors already investigated in the context of health (e.g., hardiness) and factors common in the sports world (e.g., achievement motivation).

The model component *coping resources* describes a variety of factors and behaviors that are both capable of reducing the stress response or, in the case of insufficient coping skills, increasing the stress level and injury risk of an athlete. Andersen and Williams (1988) propose the following, non-exhaustive list of coping factors: *general coping behaviors*, *social support*, *stress management and mental skills*, as well as *medication*. They suppose that a lack of general coping behaviors, such as poor diet, sleep patterns, or time management, increases the athlete's overall stress level. Social support comprises the extent and kind of personal (e.g., family, friends) and athletic (e.g., coach, teammates) networks that an athlete can rely on in stressful times. Andersen and Williams (1988) assume that social support might act as a buffer for the effects of stress, and thus, either protects the athlete from injury or makes them more prone to it. This assumption has been confirmed by some studies reporting that athletes with high levels of social support are more resilient, whereas athletes with low social support are more vulnerable to negative life stress (see e.g., Petrie, 1993; Patterson et al., 1998; Junge, 2000). The authors do not expand in detail on the last coping factors *stress management*, *mental skills*, and *medication*, but conjecture that they also influence the performance and stress response of an athlete, and thus, the risk of injury.

Interventions can be targeted at both components of the stress response. Andersen and Williams (1988) suggest that cognitive restructuring, thought stoppage, and confidence training are suitable methods for an athlete to reappraise the athletic situation and his ability to meet the demands of the situation. Additionally, an athlete might perceive a situation as less stressful if he can rely on the support of the coach and team colleagues, which can be promoted by improving team cohesiveness and managing realistic expectations. Interventions aimed at the physiological

aspect of the stress response focus on reducing arousal through techniques, such as meditation or breathing exercises. Attentional changes can be counteracted by using interventions, such as concentration training. A multimodal intervention approach seems to be most effective in reducing the stress response of athletes by influencing both cognitive and somatic aspects (e.g., Rumbold, Fletcher, & Daniels, 2012; Noh, Morris, & Andersen, 2007).

Stress Research in Dance

A few researchers have considered the *stress-injury model* (Andersen & Williams, 1988), or parts of it, directly in the context of dance. Nevertheless, several studies focusing on different aspects of dancers' health relate indirectly to the stress-injury mechanism and can be connected to the model components *history of stressors, personality, coping resources, and interventions*.

History of Stressors

Several studies have investigated the impact of life events and daily hassles on the injury risk in dancers. Mainwaring, Kerr, and Krasnow (1993) have been among the first researchers to assess the correlation between injuries and life events in university dance students, measured by the Life Experiences (LES) and Dance Experiences Survey (DES). Both general and athletic negative stress correlated positively with the duration of injury. On the other hand, the duration of injury decreased when general and athletic positive stress increased. The study was replicated a few years later among adolescent ballet and modern dancers, but correlations were only found between total and negative athletic stress and injuries for modern, but not for ballet dancers (Krasnow, Mainwaring, & Kerr, 1999). In another study by Patterson et al. (1998), negative but not positive life events were predictors of injuries in ballet dancers, particularly when dancers reported low social support in their lives. These findings were supported by the most recent study

by Noh, Morris, and Andersen (2005), where negative dance stress predicted the duration of injury among ballet dancers of different levels.

Other researchers have covered and summarized the impact of daily hassles on dancers' lives independently from injuries. Twitchett, Angioi, Koutedakis, and Wyon (2010) have assessed the daily workload for professional female ballet dancers and observed that 90% of the participants spent less than 60 minutes rest at any given time during the workday, and even 33.3% of them took less than 20 consecutive minutes. They assume that fatigue caused by the high physical workload and inadequate rest periods might expose dancers to an increased risk of injury. High daily workload as a risk factor has also been mentioned by Kelman (2000) and Grove, Main, and Sharp (2013), particularly with increasing work hours before upcoming performances and premieres.

Personality

Only three of the five personality factors suggested by Andersen and Williams (1988) have been investigated so far in dance research, with only one study mentioning locus of control (Kelman, 2000). The psychological concept of locus of control describes to which extent a person – or here dancer – believes to have control over the outcome of situations and experiences in his life (see e.g., Phares, 1976). Kelman (2000) states in her work about occupational hazards in ballet that dancers have little control over their work since solely choreographers, ballet masters, or artistic directors decide about the cast and replacement of dance roles. This external locus of control that dancers experience in their daily life combined with the physical and mental work required in ballet might make dancers more vulnerable to injuries.

Andersen and Williams (1988) included competitive trait anxiety as a personality characteristic that is not only supposed to be debilitating for athletic performance, but also deleterious to health (see e.g., Lench, Levine, & Roe, 2010). (Competitive) Trait anxiety refers to

the general and stable tendency to respond with negative emotions, such as worry, fear, and anxiety, in (competitive) situations that are perceived as threatening (see e.g., Gidron, 2013; Lench et al., 2010). Therefore, an individual or athlete with higher trait anxiety will feel more anxious and stressed in potentially stressful situations than someone with less trait anxiety. In the context of dance, the term performance anxiety is synonymously used with competitive trait anxiety as professional dance is rather focused on performances than competitions. In a sample of professional ballet dancers, R. Smith et al. (2000) investigated whether injuries were related to stressful events and somatic and cognitive performance anxiety, as measured by the Sport Anxiety Scale (R. Smith, Smoll, & Schutz, 1990). The SAS subscales somatic anxiety, worry, and concentration disruption all moderated the effect of minor stressors on injury time loss. The link between trait anxiety and health was also supported by the study of Lench et al. (2010), where undergraduate dance students with greater trait anxiety were in worse physical health condition at the end of the academic term. On the other hand, Noh et al. (2005) showed that neither the SAS subscale somatic anxiety nor the subscale worry were correlated to the injury frequency or duration in ballet dancers of different levels. Even though it appears that trait (or performance) anxiety can affect dancers' health, it also needs to be considered how dancers experience and interpret the accompanying symptoms. While somatic performance anxiety is perceived as more facilitative or even beneficial, dancers interpret cognitive performance anxiety as debilitating to performance, particularly when feeling out of control (Walker & Nordin-Bates, 2010). Thus, it is not enough to assess whether a dancer experiences high trait anxiety to predict his or her injury risk, but the distinct symptoms and interpretations by the dancer must be considered.

The only study that can be assigned to the comprehensive area of achievement motivation is by Lench et al. (2010), who investigated, besides trait anxiety, to which extent achievement

goals could predict changes in health outcomes in dance students. Of the four goal types, only performance-avoidance goals predicted worsening of physical health over the course of the study. Thus, students who set their goals in order to avoid performing worse than other students reported worse health outcomes than students who focused on performance-approach, mastery-approach, or mastery-avoidance goals. Since mastery-approach goals, i.e., mastering a task, are generally associated with positive outcomes, they conclude that an environment that promotes mastery-approach goals might be beneficial for dancers' health.

Coping Resources

The inadequate rest periods during the workday of dancers (Twitchett et al., 2010) impede phases of active and passive recovery processes that would be necessary to balance out the daily physical and psychosocial stressors (Grove et al., 2013). Particularly passive recovery and good sleeping habits are most effective to prevent physical and mental overload and the consequent increased injury risk for dancers (ibid.). However, the daily work routines of professional dancers do not allow for a regular sleep-wake rhythm, since they consist of irregular schedules, long days of training and late-night performances (Fietze et al., 2009). Over a three-month period, Fietze et al. (2009) investigated how the sleep-wake pattern, sleep efficiency, and sleep duration of classical ballet dancers are affected by an upcoming premiere. The already relatively low sleep duration and efficiency were impaired even more due to the preparations for the premiere. Interestingly, the extent of the physical training did not increase over the period, which implies that the mental aspect of preparing for an upcoming premiere was responsible for the changed sleep quality. The authors suppose that this mental stress also accounted for the reduced speed and concentration of the dancers, measured by the d2 Test of Attention (Spren & Strauß, 1998). Although the number of injuries did not increase in this study (Fietze et al., 2009), the link between mental stress causing

sleep deprivation and, in turn, sleep deprivation impairing coping resources to deal with mental stress must be considered.

Nutritional habits are another general coping behavior besides sleep patterns that can influence dancers' stress level and injury risk. Eating disorders, such as anorexia nervosa or bulimia nervosa, are common for ballet dancers with a prevalence between 16.4% and 50% (see e.g., Arcelus, Witcomb, & Mitchell, 2014; Hincapié & Cassidy, 2010). Disordered eating alone or in combination with amenorrhea and low bone density, the so-called female athlete triad, exposes dancers to an increased injury risk, particularly stress fractures (Hincapié & Cassidy, 2010; Thomas, Keel, & Heatherton, 2011). A study with female ballet students showed that the number of lifetime disordered eating behaviors were positively correlated with the number of injuries (Thomas et al., 2011). Not only was vomiting associated with injury, but dancers who reported a lifetime history of vomiting spent significantly more days out to recuperate from injury. As with sleep, disordered eating behavior might lead to a vicious cycle of stress triggering episodes of disordered eating, which, in turn, exposes the dancer to even higher stress levels by reducing his or her abilities to cope with stress.

Only the aforementioned study by Patterson et al. (1998) could show that social support moderated the effects of negative life events in ballet dancers, while other studies failed to confirm social support as a factor to predict injuries (see e.g., Noh et al., 2005). Grove et al. (2013) even assume that dancers have in general a relatively weak social support system, and therefore, increased stress levels, since dancers in vocational training mostly leave their parents' house at a young age. This early dedication to dance might not only be accompanied by a lack of social experiences outside of dance but also with fewer acquired coping skills to deal with stress (Kelman, 2000). Noh et al. (2005) have investigated whether coping skills, measured by the Athletic Coping

Skills Inventory-28 (R. Smith, Schutz, Smoll, & Ptacek, 1995), could predict the frequency and duration of injuries in ballet dancers of different levels. The ACSI-28 subscales *freedom from worry* and *confidence and achievement motivation* predicted injury frequency, but only *freedom from worry* was a significant predictor for injury duration. The authors conclude that a lack of coping skills was more important for injuries in this sample than life stress, which was also measured (Noh et al., 2005).

Interventions

In their first attempt to apply the *stress-injury model* to dance, Noh et al. (2003) also suggested how stress-management interventions can help dancers to enhance their performance and prevent injuries. Relaxation techniques, such as deep breathing, autogenic training, or progressive muscle relaxation, can be used to reduce the physiological stress response. On the other hand, dancers should employ coping strategies, such as imagery or positive self-talk, to re-appraise the stressful situation and accompanying irrational beliefs and negative thoughts, as well as to build confidence about their own abilities. Four years later, Noh et al. (2007) examined how these different psychological interventions can affect coping skills and reduce injuries in ballet dancers. After 24 weeks of training and practice, dancers in the multimodal coping skill condition (including e.g., autogenic training, imagery, and self-talk) could improve their overall coping skills, such as peaking under pressure or concentrating. In addition, participants in this condition reported less time injured than the control group.

This review shows that literature about the influence of stress on the injury risk of dancers is sparse. While additional (quantitative) research about dance can be connected indirectly to the *stress-injury model* (Andersen & Williams, 1988), studies were focused on single factors of the model with mostly inconsistent results. Therefore, it remains necessary to investigate whether

Andersen and Williams's model (1988) in its entirety can be used to predict and prevent injuries in professional ballet.

Method

Design

A qualitative approach using open-ended questionnaires and individual interviews was chosen to investigate the suitability of the *stress-injury model* (Andersen & Williams, 1988) in professional ballet dance. Thematic analysis was used to analyze and interpret ballet dancers' experiences to gain insights into how their injuries occurred, which factors could have influenced them, and how these relate to Andersen and Williams's model (1988). A quantitative approach would not be expedient since it would keep us at the surface of the stress-injury mechanism in dance compared to the rich and in-depth information that can be obtained by qualitative methods. Furthermore, qualitative research is common in (sport) psychology (see e.g., Culver, Gilbert, & Sparkes, 2012), but relatively new in dance science, which makes it even more important to break new ground in dance research.

Participants

Purposive sampling in qualitative research enables the researcher to select individuals with specific characteristics or knowledge to gain insight into the topic of interest (Sparkes & Smith, 2014). A subcategory of purposive sampling is the criterion-based method, where participants are chosen based on a set of criteria predefined by the researcher. This sampling method was used in this study to find suitable participants to answer the research question. Participants had to fulfill the following criteria to be included in the study:

- Age: Between 18 and 30 years old,

- Career: Member of a professional ballet company when the injury occurred and at the time of the study,
- Injury: Injury caused by dancing that resulted in a break from dancing for at least seven days, occurred during the last year.

With these criteria, we can assume that all participants have a similar background as ballet company members, and therefore, a comparable history of stress, for example, regarding work conditions. Choosing a one-year time window ensures a sufficiently detailed memory of the injury by the participants; a longer period could lead to incomplete recollection of the events surrounding the injury. The dance break of at least seven days was chosen in accordance with the study of Bronner, Ojofeitimi, and Rose (2003), where they specified an injury as moderate if it was followed by a time loss of one to four weeks, and as severe for more than four weeks absence from dancing. A week might sound relatively short to be absent from training, but we must consider that the mean injury severity for dancers is between seven to 28 days (see e.g., Allen et al., 2012; Allen, Nevill, Brooks, Koutedakis, & Wyon, 2013; Ekegren, Quedsted, & Brodrick, 2014). Focusing exclusively on severe injuries, with a time loss of over a month, would limit the value of the results for the dancers' daily lives. Besides that, one-week absence (i.e., 5-6 work days) for a dancer accounts for an 1-1.5 hours/day of class and 5-6 hours/day of rehearsal lost due to injury (see e.g., BalletHub, 2020, May 5¹), without adding performances or the amount of time they can only participate partially until fully recovered. No further specified inclusion criteria regarding the injury (e.g., location or type) were applied to receive a preferably broad range of dance injuries.

¹ Both participants confirmed the information on working hours in the company during or after their interview sessions.

Four dancers responded to the call for participants, which resulted in two participants in total, one woman (participant 01, P01) and one man (participant 02, P02) due to two dropouts. No further participants could be recruited due to the current Corona pandemic. Both participants were members of the same ballet company based in Munich and had a mean age of 20.5 ($SD=0.7$). The participants started dancing at the age of 2.5 (P01) and 12 (P02), on a professional level at the age of 20. At the time when the injury occurred, participants were members of their current company for 5 months in average ($SD=1.4$) and danced in the corps de ballet. Both participants reported overuse injuries located at the foot, which occurred at no specific time during the day, but by a combination of class, rehearsal, and performance according to the participants. Participant 01 described her injury as recurrent, the injury of participant 02 was new, which resulted in a break from dancing for 3-4 weeks and more than 8 weeks, respectively.

Methodological Theory

Qualitative research is characterized by a variety of methodological approaches, such as phenomenology or grounded theory. Each methodology has its own framework to conduct research and analyze data, but in recent years the question arose whether qualitative research must necessarily follow a specific methodology (see e.g., Avis, 2003). Since it was neither the aim of this study to develop a new theory (i.e., as in grounded theory) nor to answer the research question in a larger philosophical context (e.g., discourse analysis), there was no need to use a specific methodological theory (Coolican, 2014). Instead, thematic analysis was used as a flexible and versatile method, independent of any specific methodological approach, to analyze the interview data and relate it back to Andersen and Williams's (1988) *stress-injury model*.

Procedure

A study flyer (Appendix A) was sent to four professional ballet companies and two fitness studios, contractual partners of the companies, in Munich and Nuremberg in December 2019, stating information about the wanted participants and the schedule of the study. Furthermore, several choreographers and ballet masters in Munich were contacted in person, and the flyer was uploaded in two international groups for dance science professionals on social media to attract potential participants outside of Germany. Flyers were also posted at Praxisgemeinschaft Pöhlmann & Götz, a physiotherapy, osteopathy, and training practice specialized in dancers in Munich and workplace of the author. Both dancers addressed the author personally at Pöhlmann & Götz where they were currently being treated by other therapists or had received therapy in the past; none of the dancers had prior professional or personal contact with the author. The information sheet (Appendix B) was, therefore, handed out in person to the dancers, containing details about the purpose and procedure of the study as well as data handling. If the dancers agreed to participate in the study, an appointment for the questionnaire and interview was set at their chosen time and location to ensure a comfortable and familiar surrounding for the participants. The appointments took place between January and February 2020, thus, halfway through the season which starts in September and ends in July. All dancers chose a private room at Pöhlmann & Götz to conduct the questionnaire and interview.

At the beginning of each appointment, the participant was again informed verbally about the details of the study and asked if they had any further questions. After resolving all issues, the participant gave their written consent to take part in the study (Appendix C).

Phase 1: Questionnaire

First, each participant filled out a short questionnaire (Appendix D) containing ten questions about their personal history in dance (e.g., “*At what age did you start dancing ballet professionally (i.e., as a member of a company)?*”) and information regarding the injury of interest (e.g., “*How long have you been a member of the company when the injury happened?*”). The questionnaire was chosen in addition to the interview to obtain dance-specific demographic data about the participants and to get background information for the interview. In this way, participants were slowly prepared for the topic and a fluent transition to the interview was possible. Moreover, the prior questionnaire enabled to reduce the duration of the interview for the participant.

Phase 2: Interview

The interview was conducted following a semi-structured interview guide consisting of open-ended and non-leading questions (Appendix E). Each interview was recorded digitally and lasted approximately one hour (*Range=1:01h - 1:16h*). The author took notes during the interview and repeatedly checked the participant’s wellbeing during the interview. After the interview, participants were reminded about their right to withdraw the collected data and were debriefed how data will be handled. The interview was then transcribed verbatim and sent to the participants via email with the notice to review and approve the transcript within two weeks. Both participants still agreed to be included in the study and it was proceeded with the data analysis.

Interview Guide

A semi-structured interview was chosen since it allows to ask clarifying and exploring questions to understand the participants’ experience further, but still enables to compare and concatenate the responses of the interviewees. Even though semi-structured interviews are less reliable and generalizable than fully structured interviews and strongly depend on the skills of the

interviewer, it was essential to create a relaxed and informal atmosphere to make the participants feel as comfortable as possible in the unfamiliar interview situation (Coolican, 2014).

The interview guide (Appendix E) included thirteen question blocks with elaborated prompts and probes for each block. After filling in the questionnaire, participants were first asked to give a detailed description of the course of the injury as an easy start into the interview. This was followed by three question blocks about the stress reaction leading up to the injury (e.g., “*How did you feel physically before the injury happened?*”). The subsequent questions focused on factors that might have influenced the extent of the stress reaction, such as life events (“*What was going on in your general life at the time of the injury?*”). All questions were designed with the idea that, with their answers, participants could possibly refer to the existing components of the *stress-injury model* (Andersen & Williams, 1988) but that additional, new factors still might be detected by asking sufficiently non-leading questions. Designing the interview guide, attention was paid to start with easy, answerable questions before moving on to more intimate topics, such as personality. Furthermore, one pilot interview was conducted to test and refine the interview guide, which is not included in the study.

Ethical Considerations

Participants were not told specific details about the *stress-injury model* (Andersen & Williams, 1988) to avoid biasing the participants during the interview session. It was not necessary to withhold further information from the participants for the results of the study. Participants were informed about their right to withdraw from the study at any time, without giving further explanation and without consequences. Collected data could be withdrawn from the final analysis up to two weeks after the transcribed interview was sent to the participants. Additionally, participants were briefed about the potential psychological harm caused by the interview, such as

feelings of distress, upset, or comparable emotional reactions. In such situations, the participant can ask for a break or terminate the interview.

Participant identities were converted into pseudonymized codes and only personal information relevant for the research question were used; further identifying characteristics, such as locations, were removed from the study. A document matching real names with pseudonyms was kept in a secure file during the study, only accessible by the author. Non-pseudonymized data, such as signed consent forms, filled questionnaires, and audio recordings, were stored in a folder or in a secure file on an USB-Stick under lock and key until the end of the study. A transcript of interviews in which all identifying information was removed will be retained for five years.

Analytical Strategy

Thematic analysis is a commonly used method for qualitative analysis in sports psychology research (see e.g., Hill, Witcher, Gotwals, & Leyland, 2015; Tranaeus, Johnson, Engstrom, Skillgate, & Werner, 2014) because it can be used independently from a specific theoretical or epistemological framework and allows the researcher flexibility in analyzing data (Braun & Clarke, 2006). This “identifying, analyzing and reporting [of] patterns (themes) within data” (ibid., p. 79) can be performed in two ways: inductive or data-driven, where codes are solely based on the data, versus deductive or analyst-driven, where themes are created by means of prior knowledge in the research area. Coding is the labeling of single data segments, here extracts of the interviews, that are then organized into recurring themes. The deductive approach, known as theoretical thematic analysis, was chosen for this study since the aim is to relate the themes identified in the dancers’ interviews back to the existing *stress-injury model* (Andersen & Williams, 1988). The interviews, referred to as the data set, were analyzed following the guide by Braun and Clarke (2006):

- Phase 1: All interviews were transcribed verbatim by the author using f4transkript (Version v7.0.6) and reread several times in the corresponding analysis tool f4analyse (Version 2.5.4) to become familiar with the data (the fully transcribed interviews are presented in Appendix F). During this process, potential ideas for codes were marked as memos in each data item (i.e., interview) and combined with the notes taken during the respective interview.
- Phase 2: This first outline of coding ideas was refined into preliminary codes for each data item. Hereby, all extracts in the interviews were coded that appeared interesting to the author and meaningful for the research questions. Some of the data extracts were coded only once, others several times to reflect all features of the extract. Attention was paid to code the interviews with an open mind to avoid overlooking potentially relevant aspects that are not included in the *stress-injury model* (Andersen & Williams, 1988).
- Phase 3: The distinct codes of the data items were written on separate pieces of paper and sorted into potential overarching themes for the entire data set. This preliminary, manual mind map was used to structure the themes into main and sub-themes based on their significance, and to outline potential relations between them.
- Phase 4: This collection of candidate main and sub-themes was then refined at the level of the coded data extracts, and at the level of the whole data set. Firstly, all data extracts of a (sub-)theme were reviewed to see whether they fit together in a coherent way. If not, extracts were restructured until internal homogeneity of each theme was satisfactorily achieved. Secondly, all themes were checked if they accurately represent the meanings of the entire data set. The whole data set was reread again to check for previously overlooked data extracts that needed to be coded.

- Phase 5: The thematic map of the data was finalized by clearly defining and naming each specific theme and sub-theme in the context of the entire data set.

Reflexivity

Rigor in qualitative research can be promoted by incorporating reflexivity into the entire research process. Reflexivity includes not only the critical reflection of the researchers' own values, beliefs, history, and their influence on the study findings, but also considers the relationship and reciprocal influence between the participant and the researcher (Jootun, McGhee, & Marland, 2009).

Different steps were used to ensure reflexivity during the research process. First, a research diary was kept from the beginning of the study, as recommended by Jootun et al. (2009). In this way, the author could reflect on her views and own history in advance during the conception of the study. This was essential since the author is a part of the social world being studied by working with dancers and being a dancer herself. With these prior considerations, the author could be aware of her own behavior and responses during the interview sessions. The research diary was also used during and after the interviews to comment on the relationship and communication between the author and the respective participant, relevant for the subsequent analysis and interpretation of the interviews. After each interview, the author used the transcribed version to reflect on her answers and communication style, and how they have affected the data to avoid recurring errors during the subsequent interview (see Jootun et al., 2009).

Another strategy that was used during the research process was the use of so-called "critical friends" (B. Smith & McGannon, 2018). The critical discourse and feedback by people with and without background in dance about the study design, analysis, and interpretation of the data further encouraged the self-reflective process of the author.

Analysis

The thematic analysis of the dancers' interviews resulted in four overarching main themes, encompassing 12 themes with several sub-themes, concerning how the injury occurred and which factors contributed to it: *Psychophysiological Factors*, *History of Stressors*, *Personal Factors*, and *Coping Resources*. A full overview of the themes identified as potential risk factors for injuries in professional ballet dancers can be seen in Table 1.

Table 1

Overview of main themes, themes, and sub-themes identified as injury risk factors for professional ballet dancers

Main Themes	Themes	Sub-Themes
Psychophysiological Factors	Fatigue	
	Pain	
History of Stressors	Stress in Ballet	Workload
		New Job
	Stress in Life	Relationship to Ballet Masters
		Relationships
Previous Injuries		
Personal Factors	Body Image	
	Performance Anxiety	
	Motivation	
	Passion	
Coping Resources	General Health Behavior	
	Social Support	
	Skills and Strategies	

Psychophysiological Factors

During their interviews, both participants mentioned specific physiological symptoms, closely related to psychological factors, that they experienced leading up to their injury: *fatigue* and *pain*.

Fatigue

The dancers were asked whether they had noticed any physical or cognitive symptoms during the time leading up to their injury, and both reported signs of physical and mental fatigue. Fatigue is characterized by an impaired performance capacity caused by an imbalance of training and recovery periods and can arise over a short (days to weeks) or long period of time (weeks to months), which is also known as chronic fatigue, burnout, or overtraining syndrome (see e.g., Koutedakis, 2000; Liederbach, Schanfein, & Kremenic, 2013). Participant 02 experienced a lack of recovery over a prolonged period of time since he only had a few days off between his graduation in December 2018, several temporary contracts, and his new job starting in September, while participant 01 described the day-to-day impact of having a physically demanding job. In fact, fatigue is considered normal and widely accepted in ballet, as P01 pointed out: “... *well we are dancers so always kind of fatigued. [...] I was probably very tired*” (P01, 16). So, on the one hand, both participants described feelings of physical exhaustion or tiredness, even despite taking counteractive measures: “... *I feel my body always heavy like, every time I need to go to physio to have massage in the muscles, in the body, in the back and everything*” (P02, 24). On the other hand, the dancers experienced symptoms of mental fatigue similarly described by Liederbach et al. (2013), such as mood disturbances, irritability, or a general loss of enthusiasm and vigor. Particularly, P01 mentioned situations during rehearsals where ballet masters let the dancers repeat parts of the choreography several times as reasons for her feelings of frustration and staleness: “...

and then they're like, ok do it again, and you're be like, I can't, can't do this mentally, like I'm gonna loose it. Um, which was definitely the case leading up to the, the injury that it was like, a lot of like, can I do this again? can I physically, mentally do this again right now?" (P01, 168).

Not only did these symptoms of physical and mental fatigue affect the well-being of the participants, but they also influenced the correct execution of technique during dancing, leading to potentially dangerous situations for the dancers. P02 recollected different occasions during the day where his fatigue impaired his performance and attention, for example, during class in the morning or after rehearsals at the end of the day: *"Do the grand jeté without thinking in the technical, just do to do it and arrive with like, um, like a shit you know"* (P02, 60). While these attentional changes experienced by P02 do not correspond to the consequences described by Andersen and Williams (i.e., narrowing of visual field, stimuli identification; 1988), the impaired technical execution and the resulting biomechanical changes could have contributed the progress to an overuse injury. Fatigue has been suspected to be an injury risk factor in the past (e.g., Twitchett et al., 2010), which has been confirmed by some researchers who reported more injuries in the evenings and at the end of the performance season when recovery periods decreased for the dancers (Liederbach, Gleim, & Nichols, 1994; Liederbach, Dilgen, & Rose, 2008; Liederbach et al., 2013).

Pain

Both participants reported a preceding period of pain before they finally stopped dancing and were diagnosed with an overuse injury, which corresponds to current research about overuse injuries in dance (see e.g., Sobrino & Guillen, 2017). The interesting aspect about this preceding pain, where both dancers differ, is how they experienced the pain and reacted to it. Participant 01 had suffered from a previous overuse injury almost a year ago, but was without pain for several weeks before she experienced similar symptoms again: *"I think it was the second day that I felt it,*

I took barre, and I, 'cause I woke up and I was like, ok I can feel it but we'll see if I get it, if I get the joint moving, get some blood going, how it feels. So I just did the barre in class and immediately stopped and went to the PD at the ballet. And then settled a doctor's appointment, um, to go get an MRI the next day.” (P01, 8). Whereas P01 directly associated the pain to her old injury and took actions immediately by stopping dancing, participant 02 reacted differently to his pain: *“So it's a mix when I start to rehearsing this [choreography], I start to feel like the, um, like something heavy inside my demi-pointe and I didn't know how to explain it. So, I don't know, I just think it's any pain, it's gonna, it's a period of the time. I started to take it easy a bit, I did class like I didn't jump but in rehearsal [...] I was giving my 100%”* (P02, 2). Despite adjusting his training in class, P02 continued to rehearse and dance performances, although his symptoms worsened considerably and countermeasures, such as physiotherapy, did not bring relief. When his pain became unbearable and P02 went to a doctor, he was already dancing with pain for over 15 days.

The notion of “no pain, no gain” – or in dance terms “the show must go on” – is deeply entrenched in sports and ballet culture, which partly explains the high pain tolerance shown by P02 (Anderson & Hanrahan, 2008). Like other athletes, dancers perceive and accept pain as a normal part of their lives and willingly push past their boundaries, as P02 described by giving his best in rehearsals despite having pain. In fact, dancers report higher pain thresholds than non-athletes because of their higher fitness levels and the fluent transition between physical activity and pain (ibid.). The pain experienced during physical activity can even serve as a confirmation for given effort and as motivation to proceed dancing, as Anderson and Hanrahan pointed out (2008). But this so-called routine performance pain (i.e., acute, short in duration, voluntarily, controllable) needs to be clearly distinguished from injury pain, pain that is not controllable by the dancer and is often chronic. When a dancer experiences pain, he first evaluates whether the pain

is threatening or not, and second, whether he can control the pain, which then influences what coping strategy the dancer will employ. The dancer should, therefore, appraise routine performance pain and injury pain differently and employ different pain coping styles. However, Anderson and Hanrahan (2008) could show in their study that dancers did not discriminate between both types of pain, even considering the pain severity, and consequently, did not appraise performance and injury pain differently or used different coping styles. We can observe this in the behavior of P02: Firstly, he was hesitant and indecisive about how he should evaluate his experienced pain and the pain severity, especially since a lot was at stake for him: *“I was afraid to lose the opportunities, this was ... the point is, it was my first job and yeh. And now I expect, I expect a lot like, the pain it would be gone if I just take it easy in the class or something like that”* (P02, 98). Secondly, he used measures to cope with his pain that turned out to be insufficient and inappropriate to stop the progression of the overuse injury, such as adjusting his intensity in class and avoiding the pain: *“I think the, my brain sometimes block it, this pain, that I didn't feel it. But I always knew that the pain was there”* (P02, 34). Interestingly, P01 reacted in a similar way as P02 to her old injury. After being diagnosed with a contusion in her first metatarsophalangeal joint in February, she continued dancing until May to audition for professional ballet companies. Like P02, she decided to continue despite the pain to pursue her goals. But when the pain returned months later, she successfully drew on her former negative experiences, adapted her coping style, and thus avoided exacerbating her injury this time.

Even though the participants experienced some of the physiological and attentional changes, such as increased muscle tension and attentional deficits, described by Andersen and Williams (1988), the *stress-injury model* cannot fully explain the injury onset of the participants. Researchers criticized in the past that the acute stress response of the *stress-injury model* only

accounts for acute, traumatic injuries but not the mechanism behind overuse injuries (see e.g., Appaneal & Perna, 2014; Johnson, 2007; Ivarsson et al., 2017). In addition, participants in another qualitative study about overuse injuries in floorball players described similar factors like poor recovery, staleness, and the acceptance of pain prior to their injuries like our dancers (Tranaeus et al., 2014). Based on that, it seems that the mechanism behind the overuse injuries of our participants progressed over several steps. The participants began to experience symptoms of physical and mental fatigue due to an imbalance of training and recovery periods, which represented both physical and mental stress. These acute symptoms, mainly untreated by the dancers, progressed into long-term, chronic fatigue that also impaired the dancers' technique (see Koutedakis, 2000). The constant, repetitive execution of movements biomechanically altered by fatigue must have been the starting point for the recurring joint inflammation of P01 and the beginning stress fracture of P02. Although P01 ignored her symptoms of physical and mental fatigue, she responded immediately to the painful warning signs of the beginning injury. In contrast, P02 disregarded his fatigue and pain because of his ignorance and the sociocultural expectations in ballet. As a result, he suffered a severe and prolonged injury which might have been prevented or at least alleviated.

History of Stressors

Preceding their injuries, the participants experienced different stressors in form of major life events as well as daily hassles. The stressors could be separated into *stress in ballet*, *stress in life*, and *previous injuries*. The number of different stressors gives reason to believe that not one, but the accumulation and diversity of the stressors affected the injury outcome. This was also mentioned repeatedly by participant 01 during the interview: “... *the minute I knew this study was like, involving with stress in dance, definitely stressed all the time but especially 'round the holidays*

and my family was about to come and having to run the show as many times and moving to a new country, culture, everything” (P01, 30).

Stress in Ballet

Three factors were identified as conscious or unconscious stressors for the participants regarding their work in the ballet company: workload, their new job as professional ballet dancers, and the relationship to the ballet masters of the company.

Workload

The workload in the company was identified as both physically and mentally stressful for the participants. During the weeks before the participants sustained their overuse injuries, the dancers were rehearsing a new ballet in addition to their usual rehearsals for the standard repertoire of the company. With the upcoming premiere of the new ballet, not only did the amount of the rehearsals increase but the intensity did as well. Unfortunately, recovery periods stayed unchanged, which could explain the symptoms of fatigue perceived by the participants. While both participants must have objectively had a comparable workload, assuming that they were rehearsing the same choreographies and are both members of the corps de ballet, the perceived stress differed between the participants. Participant 01 found the additional rehearsals and performances to be quite stressful, whereas participant 02 assessed the workload itself differently: “... *I think is not a lot but every rehearsing that I had, I like given 100%, I'm pushing me a lot and I like, my body was tired” (P02, 10).* Moreover, both participants mentioned doing additional work besides their usual workload. As P01 described: “*I mean I had the opportunity to cover a lot of roles that I wouldn't normally get as a beginning corps member, um, not performing them but at least learning and eh covering, [...] that's an extra rehearsal that you might not normally be doing” (P01, 56).* P02 remembered some sort of fooling around in the evening after the normal rehearsals were done:

“Joking, um like, how can I explain it, when I put some music and start to do things or some fouettés or [...] big jumps or something like that. After rehearsal, like 8:30 of the night when your body is like exhausted, but you are still happy and doing things with you friends” (P02, 56). Although he did this for fun, it might have influenced his injury since his technique, such as correct landing from jumps, was already impaired by fatigue at that point. The descriptions of the participants reflect prior research concerning workload as an occupational stressor for dancers (see e.g., Kelman, 2000, Fietze et al., 2009; Twitchett et al., 2010; Grove et al., 2013). The increasing workload and related physical and mental stress for preparing the upcoming premiere might have influenced the injuries of the participants by causing or exacerbating preexisting fatigue.

New Job

Both participants faced some more typical as well as some specific stressors regarding their new job in the ballet company. The new job represented a big change in life for both of them. Not only was it their first professional contract in a company after their graduation, but it affected all areas of their lives, starting from moving to a new country and learning a new language, to acclimating to new colleagues and work. While both participants described the transition period as less difficult than expected, they still had to process many different experiences daily. Participant 01 also recalled that she was not used to the way the company works, particularly learning and performing her new roles, which led to her feeling stressed before performances: *“... if it's a ballet they've been performing already, so excluding only [choreography] this season, every role that I've done I have either learning very quickly in studio and someone has kind of taught me right away or I've learned from a video and then had to do it. And then never done the role in costume on stage with the wigs, with the make-up, never been on the floor 'cause the floor changes per performance. [...] But if you never have a stage call, then your first time doing it on stage is a*

show. Um, which can be heart-racing and a little, um, it can make you anxious and a little bit stressed about it for sure” (P01, 166).

Besides the new surroundings and work conditions they had to adapt to, the participants also remembered having difficulties finding their own position in the company. Being a new member of the corps de ballet, both participants had to first earn the trust and respect of the ballet masters to be selected for roles, which particularly P01 was confident about: “... *I definitely was more confident in myself once I got the job and when I came over 'cause it was like, ok I have the job and I'm like, someone has said you deserve to be a professional. [...] And especially when they started putting me into the ballet, I was like, ok they trust me to do this, they think I'm ready” (P01, 156).* In contrast, P02 remembered that the ballet masters did not cast him for the first few shows, which was both new to him and upsetting after he had been dancing the principal roles at his former junior company. Although P02 could prove himself soon and started dancing performances, the pressure to fulfill the standards of the ballet masters was even surpassed by the high expectations both participants had for themselves. P02 described putting high effort into his work to improve himself, but his hopes were suddenly dashed with his injury: “... *it could be a big step to me in the company. But it wasn't” (P02, 50).* Additionally, P01 reported that she experienced more self-doubts and self-criticism regarding her performance in the company, and consequently felt more stressed up to the injury: “... *before the injury I was more in the phase of like, ok what are you doing?, like, work on this, work on that, like, pick it up [...] which comes with dancing as well. And comes with the profession. I feel like easily it probably could have been a factor in stress and it's like a lot to hold, reasoning right before the injury” (P01, 158).*

Whereas these experiences are relatively understandable and not dependent upon age when starting a new job, the participants described another more unique factor that represented stress for

them: self-responsibility. Even though both participants worked in junior companies during their last years of school, both experienced the transition from the learning atmosphere strictly guided by the ballet teachers to the more self-responsible work in the company as difficult, albeit for different reasons. P01 reported that her self-doubts before her injury were related to the fact that the ballet masters did not give her as much feedback or corrections as she had been used to from her teachers: *“So it's like you have to be your own teacher at some point and take your technique and your artistry and your dancing into your own hands. And then it's um, it's on you and, you know it's something you have to learn over time for sure and I've definitely talked to older professionals and teachers and they say the same thing like, it does just take a little bit of time once you get into a company to find your rhythm, to figure out how you need to work without someone telling what to do”* (P01, 158). P02, on the other hand, had difficulties performing his best while listening at the same time to his body and respecting his personal limits: *“You don't need to like to, every class give your best, to like exam in school, no you can [...] take it easy sometimes, and I didn't know that”* (P02, 12). He recalled that he pushed himself to his maximum every single day, whether in class, rehearsal, or performance, which explains his fatigue. On top of that, no one gave him advice or helped him: *“But I don't had anyone to, to tell me like, take it easy, or something like that, no, I need to learn to myself. I need, need to learn with the injury, to notice it”* (P02, 90). Although the participants will overcome these transitional issues with increasing experience in the future, the unfamiliar lack of guidance and support influenced the stress level and mental health of P01 and directly contributed to the injury of P02. The various problems young dancers face, just as most young people, should not be underestimated, as the suddenly expected self-responsibility while transitioning from school to work setting is considerable.

Relationship to Ballet Masters

The relationship to the ballet masters of the company were described as problematic and a cause for stress by both participants for various reasons. Participant 01 felt pressured to uphold the high standards and expectations of the ballet masters: “... *they are very, very hard on us and they want [...] the most out of their dancers and they push them and they ask for a lot*” (P01, 76). She further described that although some of the ballet masters were more understanding and showed support for the dancers, they also had to carry out the instructions of the director. Moreover, P01 recalled that ballet masters directly confronted her to lose weight, in some instances in front of other members of the company. Her description let assume that she was not an individual case, but that enforced weight loss, still widely common in the ballet community, is a general issue in the company: “... *they're [...] directors, and they have that stigma and that stereotype that they want that matchstick-thin dancer*” (P01, 68). Even though she did not follow their directions, she started to experience more body-related concerns up to her injury (see *Body Image*).

The aspect that P01 mentioned several times during the interview and stressed her the most, was, however, the teaching style of the ballet masters itself. Especially the often generalized and negative comments of the ballet masters to repeat parts of the choreography for no reason left her feeling exhausted, annoyed and frustrated: “*I mean them just telling us that we needed to do it over and over again and not telling us why and just saying, well it's not good. Which is like, seems kind of like a nothing but when you've done it so many times and you're still new, it's like, ok why are we doing this again and again and again*” (P01, 60). Her feelings of frustration are based on a perceived loss of control in these situations and reflect her increased stress level (see e.g., Kelman, 2000). The behavior of the ballet masters did not only affect her negatively but impaired the climate in the whole company, as she described: “*It can be very negative. Um, because the directors tend*

to be negative and tell us that we aren't good enough or that it's not enough and we need to do more and or just the same repetition thing. And then, everyone gets frustrated and then no one wants to do it and then, there's an, just a poor energy in the whole company” (P01, 78). Furthermore, the broad, negative feedback also caused her to experience more self-doubts since she could not distinguish whether the comment was directly addressed at her or not, and therefore, she constantly questioned her own performance critically.

Although participant 02 did not describe all aspects stated by P01, he also mentioned the daily uncertainty in the company and associated loss of control: *“You never know what's gonna happen in the one professional company, one day you can dance this role and another day can be another person come and, um, and dance this role [...] You never know when director runs so, every day is like surprise for, to everyone” (P02, 210).* Nonetheless, he did not experience this uncertainty nearly as stressful as P01, which could be attributed to the fact that his mindset helped him to cope with situations out of his control (see *Skills and Strategies*).

The last aspect that stood out during the interviews was how the dancers addressed their injury to the ballet masters and how these reacted to it. When P01 realized on the second day during class that she needed a doctor's appointment for her recurring pain, she described the reaction of the responsible ballet master as following: *“So initially she was frustrated because there are a lot of people that have gotten injured in the last month and a half. Um, so I think it was just for her like in that moment it was like, argh I have to fill in another spot” (P01, 100).* But since P01 was straightforward that she had suffered from a similar injury in the past and needed to stop right away, the seriousness of her pain could not be questioned. P01 also feared what the ballet masters would think about her time off and whether she might give the impression that she is just not motivated enough to dance. Similarly, P02 was too afraid of the consequences and losing his

roles, and therefore, waited to tell the ballet masters about his severe pain until the very end when he could no longer dance.

The descriptions of the participants demonstrate that the relationship between the participants and ballet masters is problematic for various reasons. Due to the general structure and procedure in the company, the power relation between the dancers and the ballet staff is relatively unbalanced, for example, concerning the rehearsing process or the assignment of roles, as also described by Kelman (2000). This leading from the top down, which affected the atmosphere of the whole company according to P01, and the general relationship between the ballet masters and dancers represented a considerable daily stressor for the participants.

Stress in Life

The participants also experienced stress in their general life outside of the ballet company. But since ballet takes up a big part of the participants' lives and influences nearly every aspect of it, general life stressors are hard to distinguish from stressors related to ballet. As described above, the participants experienced stress concerning their new jobs in the company and the subsequent changes, but the associated move to a new country with different culture and language also represented general daily stressors. Another aspect outside of ballet, which particularly caused stress for participant 01, were relationships to other people.

Relationships

Participant 02 did not mention any relationships outside of ballet as stressors, but participant 01 described her relationships to her family and to her boyfriend as stressful prior to her injury. Since her family came to visit P01 before Christmas, she struggled to reconcile her work in the company with spending enough time with her family: *“And like my family is there, so we are taking, I'm trying to like take time with them but also like, manage everything in my life and*

it's just like very overwhelming, is kind of the best way to put it" (P01, 172). Besides feeling overwhelmed by the double load of family and work, she also remembered being worried about meeting the wishes of her family as well as being more irritable, which she recognized as a sign of being stressed.

On the other hand, P01 recalled having some relationship problems with her boyfriend, who is also a member of the company, before her injury: *"... if we are having something in our relationship outside of work, we do still work together. Um, which can be hard 'cause then it's like, you have, you have to deal with it all the time. It's like even just seeing them at, in work and they are not like talking to you, then it's like, well what's going on there?"* (P01, 80). Although their issues were unrelated to ballet, they were still affecting and distracting her during work: *"Not when I was physically dancing but when I was not, yes. So like, if I was sitting on the side, waiting for my piece or just like watching them do their role, it definitely would caught my mind"* (P01, 84). Consequently, we must keep in mind that stressors independent from ballet do not only contribute to the overall stress level of a dancer but also can directly affect their work.

Previous Injuries

Participant 01 classified the injury discussed in her interview as recurrent from an old overuse injury sustained in February 2019. She remembered starting with slight symptoms in the company, despite taking the summer months between her graduation and her new job off to recover from the injury: *"... I did all of the rehab in the [home country] there and then I came here and it was still a little bit, I could feel it but not nearly to this extent and then, I stopped feeling it completely for probably two and, twoish months"* (P01, 4). After this short pain-free period, she started to feel the same symptoms again, which suggests that her old injury might not have completely healed in the first place. Moreover, P01 identified similarities between the

circumstances surrounding both injuries. At the time her old injury occurred, she was working hard to get a full-time contract after being a two-year trainee in her old company, a close friend got severely injured in an accident, and she was still recovering from an eating disorder, which she summarized: “*So both kind of instances, it's like there was a lot happening all at once and the injury occurred within that time frame*” (P01, 52). Not only does this confirm Andersen and Williams’s assumption (1988) that inadequate recovery from an old injury increases the injury risk, but also the similar circumstances of both injuries give reason to believe that the accumulation and diversity of the stressors might have put P01 at risk.

We can see that the participants faced various stressors before their injuries, big life events and daily hassles as well as positive and negative stress. Their experiences show that the influence of life events and daily stressors in life on their injuries could not be clearly separated, as described in the *stress-injury model* (Andersen & Williams, 1988), but that the distinction between stress in ballet and in general life is all the more important. Especially the numerous and diverse stressors in ballet were a burden to the participants and increased both their physical and mental fatigue and overall stress level.

Personal Factors

The following themes were identified as factors within the participants, which might have influenced the injuries of the participants directly or indirectly by increasing their overall stress level: *body image, performance anxiety, motivation, and passion*. Whereas some similarities between the participants could be observed, the participants showed varying degrees of these personal factors, which to some extent also overlap with each other.

Body Image

Participant 01 had suffered from a minor eating disorder in the past and described that her body image issues had risen again prior to her injury and left her feeling overly self-conscious about her body: *“There's always a thing in the back of the dancer's head that's like, do I look ok? Like, how is my body looking? Especially when you have had issues in the past with, with weight and body image. [...] Um, which I had been feeling a little bit more recently, just kind of like, ok I don't how my body looks, do I look ok? like, what is going on? Um, which for like normal people, they might look and be like, what are you talking about? But when you stand in tights and leotard every day in the mirror”* (P01, 60). As described before, she recalled situations where ballet masters communicated openly with her to lose weight to fit their preferred body type, which she strictly refused regarding her background. But the daily self-evaluation of her body in the mirror and comparison to other dancers were decisive enough to cause her to experience body-related concerns and stress during work. While she did not relapse in terms of her former eating disorder, we must remember that recovery from eating disorders goes through phases and that the environment in dance, with excessive exposure to mirrors, tight clothing, and sociocultural pressure to conform to a certain body type, encourages a negative and often distorted body image upon dancers (see e.g., Pierce & Daleng, 1998).

Performance Anxiety

Andersen and Williams (1988) suggested competitive trait anxiety, or performance anxiety, as a factor that might influence the stress response, which was only partly confirmed by the participants. Participant 02 described experiencing normal lamp fever before performances in the new company, which did not affect his current injury. However, he had suffered from serious health problems before major competitions in the past: *“So I was so much nervous and I was this skin*

reaction that we call in [home country] herpes zoster, and after this like, I don't feel nothing, like nervous yeh. I think my brain blocked this time because it was so painful in this region of the chest, the back, [...] so I think my brain blocked it, I don't feel like so much nervous before just I feel the sensation, desire to be on the stage” (P02, 194). Whereas this painful experience seemed to have solved his performance anxiety, participant 01 experienced some somatic symptoms and worries before new performances in the company: *“But then it's like, for me personally it's like, those moments when the music is happening before you go on or before the curtain comes up, it's like, you feel a little like tense and you're like, ok like, I know this, I know it so why am I thinking like, oh my god I have to go through the steps, I don't know them. Um, but then for me like once it's start, I'm fine. All of that goes away”* (P01, 166). Even though these symptoms might have affected her stress level more than for P02, it still can be classified as lamp fever and not debilitating for her performance. Nevertheless, her anxiety was largely because she did not have the chance to try out new choreographies in stage calls prior to the actual performance in front of the audience. Her insecurity about the unfamiliar floor, costume, hair, and makeup, or just not practicing the choreography sufficiently, increased her normal lamp fever considerably, which could have been easily avoided. The descriptions of the participants suggest that performance anxiety did not overly affect their health and injuries. Nonetheless, the results of former studies can neither be fully confirmed nor contradicted by the participants (see e.g., R. Smith et al., 2000; Noh et al., 2005; Lench et al., 2010).

Motivation

The behavior of the participants can be described as being both extrinsically and intrinsically motivated. Both participants explained during the interview that they had put a lot of effort into their work to receive praise from the ballet masters, or to be selected for roles.

Participant 01 recalled practicing additionally during rehearsals to gain the ballet masters' attention, something she was used to from her previous school: *"Like if you're doing it on the side, you might be rewarded for that, you, they might see that and will be like, ok wow they're really working hard, or in class if you're working, they can see that"* (P01, 146). Roles as rewards was also the driving force behind participant 02's efforts: *"... I was new in the company so I really, every time, every rehearsal, every class I would like to give my 100% for that they see my potential"* (P02, 10).

However, both participants were equally striving to challenge and improve themselves constantly, as described by P02: *"To getting better to myself, I would say is my goal. To superate my challenge, my own challenge [...] I'm not comparing with like, with anyone or ... just want to be better than me every day"* (P02, 144). What the dancers described can best be assigned to mastery-approach goals, i.e., that the focus of the participants was to attain mastery of a task without comparing themselves to the performance of their colleagues (Lench et al., 2010). Although mastery-approach goals are associated with positive outcomes (ibid.), both participants also experienced negative side-effects of having this constant need for improvement and having these high expectations for themselves. P01 remembered that in connection with her self-doubts she sometimes struggled to focus on herself: *"... I need to make sure I'm thinking about how strong I am and what I can do and not what other people can do that I am not as good at [...] but it, it definitely can take a negative, a negative toll because it is hard all the time to be completely happy with your dancing"* (P01, 152). P02 did not mention any issues in relation to his colleagues, but he described that his high goals had a direct influence on his injury: *"... I couldn't stop that [dancing] because I had some [...] goal. I couldn't stop but I was worried because I can't stop"* (P02, 170). His high demands for himself made it impossible for him to listen to his body, even though he knew that he needed to stop because his pain worsened.

Passion

Both participants expressed their deep love for dancing during the interviews, despite facing the various stressors in ballet, as P01 described: “... *I just love dancing. Um, especially on stage with the first show of [choreography] that we did, even though, you know, they've been hammering us doing it over and over again in the studio and when we started it on stage I was like, ok here we go, let's do it. Um, like the moment I start dancing it's like everything else kind of falls away, like that's when I feel like most myself and calm and like, genuinely happy in that time*” (P01, 132). She further continued that ballet is such a big part of herself that she feels something is missing if she does not dance. Their descriptions emphasize that their passion for ballet defines them, and therefore, represents a central aspect of their self-identity. However, turning their passion into a job was also connected with some disadvantages. Both participants pointed out that they try hard to find a balance between work and their lives outside of ballet and engage in other interests or activities to counterbalance ballet. Moreover, both described that their passion caused them to overload themselves during ballet, in some specific occasions or more generally. In the case of P01, her desire and need to practice steps constantly on the side during rehearsals offered her new opportunities, but at the same time might have contributed to her injury: “... *I do think it possibly can come off negatively that your body does then go into a state of, um, stress overuse. In my case that, um, you know it is a lot for the body, the take on all at once*” (P01, 150). Participant 02 explained that his passion and ambition were the reason that he pushed past his limits in every class, rehearsal, or performance, whether it was necessary or not: “*Sometimes I was thinking like, more take it easy but I think my natural, I have the habit to always like, like too much, like that's wrong I think. I need to fix it, but this still needs time, I think*” (P02, 160).

Passion can be separated into harmonious and obsessive passion, according to the Dualistic Model of Passion (Vallerand, 2012). Harmonious passion (HP) characterizes the autonomous internalization of an activity into the identity of an individual. Thus, the person freely chooses to engage in the activity, considers it as important, and deeply enjoys it, but it does not overpower other aspects of life. We can observe this in the deep love for ballet that both dancers expressed, which made them consider making a job out of their passion in the first place and brings them daily satisfaction in the company. Obsessive passion (OP), in contrast, describes the controlled internalization of an activity, either because the activity is attached to intra- or interpersonal contingencies (e.g., self-esteem, social acceptance), or the urge to engage in it is uncontrollable (Vallerand, 2012; Rip, Fortin, & Vallerand, 2006). This uncontrollable urge leads to rigid persistence in the activity, which could explain why both participants did not stop or at least reduce dancing, despite knowing that it might have negative consequences. Studies have shown that while HP is associated with positive outcomes, OP is linked to negative effects. Gustafsson, Hassmén, and Hassmén (2011) could demonstrate that athletes with OP reported higher burnout, perceived stress, and negative affect scores. Furthermore, Rip et al. (2006) even propose OP as a risk factor for dance injuries since OP was positively correlated with prolonged suffering from chronic injuries and ignoring injury-related pain, as well as negatively associated with partially stopping dancing because of an injury. While their passion was beneficial for the participants from a motivational perspective, it also influenced their injuries by increasing their stress and fatigue level and being another reason that the participants willingly ignored their symptoms of fatigue and pain.

Andersen and Williams (1988) stated their suggestions of moderating personality factors to be non-exhaustive and we can see that the dancers showed additional characteristics that put them at risk by increasing their fatigue and stress. These personality characteristics are all the more

important since their intrinsic nature makes them permanent injury risk factors to which the dancers are exposed on a daily basis. Even though the personality characteristics and differences of the participants could not be more specifically defined with the interviews, other qualitative studies have identified similar personality factors. In their study about overuse injuries in floorball players, Tranaeus et al. (2014) described motivation, passion, and athletic identity as person factors that led the players to accept their pain and continue training despite it, ignoring the consequent risk of injury. Additionally, Blevins, Erskine, Hopper, and Moyle (2020) identified supermotivation and obsession, e.g., extensive, additional training or neglecting other aspects of life, as risk factors for overtraining in vocational dance students. These studies reinforce that the identified personal factors are not unique to the participants but are general risk factors for overtraining and overuse injuries inside and outside of ballet.

Coping Resources

The last identified main theme *Coping resources* includes behaviors and factors that helped the participants to deal with the experienced stress, or, in turn, might have increased the stress level by a lack of these. Besides their general health behavior, the dancers particularly highlighted social support inside and outside of ballet, and personal skills and strategies to cope with stress.

General Health Behavior

None of the participants could recollect changes in dietary habits or sleeping patterns prior to their injury. The question arises whether the sleep quality and duration of the participants was unconsciously affected by the stress of the upcoming premiere as Fietze et al. (2009) reported that the subjective reporting of the ballet dancers did not match the objective measurements of their sleep patterns. Both participants, however, mentioned during their interviews that they did not do any additional fitness training besides ballet as they would normally do: "... *I haven't really been*

cross training much at that point, um, just because we had so many rehearsals and shows” (P01, 56). Also participant 02 noticed changes when he started to train again after sustaining his injury: “So after the injury like I, I start to do more gym because [...] before I didn't have energy to go like to the gym or something like, after I'm off I like feel so, so much energy” (P02, 26). With their increasing workload, it is understandable that they lacked energy to train, but it also might have had negative consequences. Inadequate physical training has been shown to contribute to dance injuries since ballet training alone is not sufficient to gain strength or cardiorespiratory endurance, and therefore, should be supplemented (Russell, 2013). Moreover, fitness training could not only have balanced out the physical demands of ballet, but also might have reduced the mental stress the participants experienced during rehearsals (Russell, 2013; Ramel, Thorsson, & Wollmer, 1997).

Social Support

Social support inside and outside of ballet was described by both participants as a protective factor for stress but also as a risk factor when social support was missing. Since both previously moved countries to start working in the new company, the participants left their old network of friends and fellow students and had to build new relationships and networks in the company. Participant 01 did not have any difficulties in joining the company and meeting new friends and her boyfriend despite being nervous about it, while participant 02 described his start at the company differently: *“I don't have like so many friends that I had before in [home country], so, it was a period, [...] could be like difficult period” (P02, 74). Although he soon found good friends in the company and describes his relationship to other colleagues positively, he did not confide in his close friends how severe the experienced pain preceding his injury was. Besides this close friend group, P02 did not mention any other relationships during the interview but described the difficulties he had faced as a vocational dance student before: “I left my mum with 13 years*

old so, the life teached me a lot, not my mum. [...] Sometimes it's not easy to learn with the life, it's better your mum teaching you" (P02, 180). His description suggests that P02 might have a relatively weak social support system based on leaving his home at a young age and having no additional network outside of ballet. This reflects previous assumptions (Kelman, 2000; Grove et al., 2013) that dancers have weaker social support because of the early dedication and allocated time for ballet, which results in increased stress itself and fewer coping skills to deal with additional stressors.

Participant 01, in contrast, could rely on a wide social network consisting of old friends at home, friends and her boyfriend in the company, and her family that support her in every way. But like P02, she described the difficulties of building a network outside of ballet: *"... my friends here are all in the company, I don't really know that many people outside, just 'cause I'm not from here [...] and when you're working that much you just don't meet people because you don't mix in any other circles"* (P01, 94). However, she pointed out that having close friends and her boyfriend in the company has many benefits, since they share the experiences and problems of everyday life in the company, something that people outside ballet like her family members cannot fully understand. But also the support of some of the ballet masters helped her to settle in the company, for example, by understanding the tough requirements demanded from the dancers or by reassuring and encouraging her before a performance. Despite having a big supportive network in general, P01 remembered that before her injury, she could not see her friends anymore outside of work due to the increasing workload and her obligations to her family. While she was able to make up for the lack of time with her friends through the time and support of her family, she recalled missing the support of her boyfriend during this time. As mentioned before, the relationship problems with her boyfriend not only caused stress for her inside and outside of work, but the consequent lack of

support from his side was an additional burden for her: “... which is definitely something that I like, I had been needing [...] but my boyfriend and I were like going through something like, didn't really know what was going on there” (P01, 180). In her case, we can observe again that missing social support, on the one hand, affected her stress level because P01 could not share and confide her stressful experiences to specific persons like she would usually do to attenuate her stress. On the other hand, not receiving the social support by her boyfriend that she was expecting to get might have been a stressor itself for her, which she was additionally worrying about. Even though the existing literature could not find a consistent relationship between social support and stress in dancers (see e.g., Patterson et al., 1998; Noh et al., 2005), the descriptions of the participants suggest that social support acts as a factor that can make dancers both more resilient or vulnerable to stress.

Skills and Strategies

Both participants used strategies or acquired certain skills over time that helped them to deal with stress. Participant 01 described that tasks, such as reading, stitching, or journaling, help her to calm down and relax after an exhausting day at work, but that she also actively seeks emotional support: “I'm the kind of person where it's like, if I'm having a hard time about something or I'm stressed or I'm worried, I sometimes just need like someone there with me whether it be like my mum or my boyfriend or my best friends, like I just sometimes need someone to be there and like give me a hug” (P01, 180). On the other hand, she recalled that before her injury, and during stressful times in general, she often struggles to recognize these difficult phases and to take care of her mental health using the described relaxation strategies: “I don't really think I realized them [relaxation techniques] before the injury until I had, until I wasn't dancing. [...] when you're going non-stop all the time, it's like, ok I get up, I go to work, I go to lunch with my

family, I go back to work, I go to dinner with my family, I go home, I go to sleep. Or like whatever it might be in the day and it wasn't really until, until I got injured and then like took the time off that I was like, oh my god I'm so overwhelmed right now, there's so much going on that I can't even, um, I can't cope with all that right now" (P01, 182).

Participant 02 did not use any specific relaxation techniques as described by P01 but found a way to cope with the uncertainty and subsequent stress experienced by the daily work in the company. The lack of control that particularly stressed P01 (see Kelman, 2000) did not affect P02 since he accomplished to change his perspective and perceive these situations as some sort of surprise: *"In another way, we can control but not the situation but how we, how we can like, um, how we can do it with the situation"* (P02, 218). By reappraising a problematic situation out of his control into something positively he deeply enjoys, he could reduce his stress response successfully. But he also admitted that his way might not be suitable for everyone: *"... It's a problem but I, we can do nothing about it but we can just like protect ourselves or find some way to, to live good with it. And some people can't do it and that's the point"* (P02, 224). Although both participants found ways to cope with their experienced stress, the skills and strategies were unconsciously acquired and used by the participants, since they have never been taught any stress management strategies. Also, we have to remember that both are young adults at the beginning of their career and lack the experience and knowledge to take care of themselves, as P01 described: *"... you know it's just something I, I still don't necessarily know exactly what I need to do for myself"* (P01, 178).

The experiences of the participants showed that factors, such as social support, can help dancers to cope with stress. But the lack of coping resources, in this case inadequate physical training, low or missing social support, skills, and strategies, particularly seemed to increase the stress level, and put the dancers at risk. This has also been confirmed by the results of Noh et al.

(2005) or Traanaeus et al. (2014), who even propose in their model about psychological risk factors for overuse injuries that effective or ineffective coping might be the decisive factor that makes athletes less or more prone to overuse injuries.

Conclusion

The aim of the present study was to investigate in a qualitative approach whether the *stress-injury model* by Andersen and Williams (1988) is suitable to predict and prevent injuries in professional ballet by analyzing the experiences of formerly injured dancers. While the descriptions of the professional ballet dancers could confirm partly the suitability, significant differences to the *stress-injury model* (ibid.) could still be identified. Both participants stated during the interviews that their overuse injuries were caused by physical and mental fatigue, and their acceptance and ignorance of accompanying symptoms and pain. Their experiences suggest that the underlying mechanism proposed in the *stress-injury model* (ibid.) cannot explain the occurrence of overuse injuries (see also e.g., Ivarsson et al., 2017). The described injury mechanism was influenced by the various stressors the dancers faced inside and outside of the company, which contributed to their injuries either directly, by causing and exacerbating physical fatigue, or indirectly, by increasing the overall stress level, and therefore, mental fatigue. The proposed moderating variable *history of stressors injuries* (Andersen & Williams, 1988) does therefore apply to the experiences of the participants, however, the distinction into stress inside and outside of ballet, in addition to previous injuries, appeared more appropriate. Besides these stressors, the participants reported different personal factors that intensified their fatigue and stress level, such as motivation and passion. The differences between the identified factors and those proposed by Andersen and Williams (1988) emphasize that additional personality traits more specific to ballet are of great importance, particularly because these represent persistent intrinsic

injury risk factors for the dancer. While the participants reported some coping resources that helped them to deal with the experienced stressors, as Andersen and Williams expected (1988), their descriptions highlight that the lack of these coping resources especially contributed to their injuries, by making them more vulnerable to stress and fatigue. Even though the *stress-injury model* by Andersen and Williams (1988) provides a reasonable framework, the results of the qualitative study and current dance research demonstrate that the relationship between stress and injury risk in ballet is much more complex and specific.

No study so far has investigated the *stress-injury model* (ibid.) in professional ballet, or the connection between stress and injury risk in general, from a qualitative perspective. Previous quantitative research has been focused on single injury risk factors and the only attempt to summarize existing literature about the *stress-injury model* (ibid.) in dance could not provide a full overview, due to the limited amount of research available (Noh et al., 2003). This study does therefore not only update the study by Noh et al. (2003), but the qualitative approach gives us in-depth and unique insights into the experiences of professional ballet dancers for the first time, and thus, a holistic picture of how stress influences their injury risk. The descriptions of the participants demonstrate that additional injury risk factors outside of the *stress-injury model* (Andersen & Williams, 1988) are often not even considered. Furthermore, we can observe that some psychosocial factors affected the participants' stress level and injuries more, solely based on the amount the participants talked about these issues during their interviews, something that is not evident from previous quantitative studies. This study represents, therefore, another step forward in the investigation of stress and injury in professional ballet, firstly, by confirming existing research results with real life experiences, and secondly, by identifying which already known risk

factors need to be investigated more intensively and which new research paths need to be taken in the future.

However, a number of limitations exists that should be addressed in future research. Firstly, the small sample size and the homogeneity of the participants regarding age, company, and rank raises the question whether their experiences can be transferred to other professional ballet dancers. Secondly, although the author reached out to several ballet companies and contractual partners, both participants responded to the study flyers posted at the workplace of the author, which might be problematic for some reasons. Since both participants wished to conduct their interviews at the practice Pöhlmann & Götz, it was not possible to completely conceal their participation in the study to some of the author's colleagues. Apart from that, no contents of the interviews or final results were and will be shared or discussed in any way with the author's colleagues, since the privacy and protection of the participants is, of course, of paramount importance. We can also assume that both participants were already interested and positive towards research in dance before the study, which might have led to self-selection bias, and thereby, affected the study results. Another limitation might have been that the author is part of the dance community by working closely with ballet dancers. Even though this enables a better understanding and sensitivity about the research topic compared to an outsider, the quality of the interviews might have been impaired by being too personally involved as a researcher, despite using measures to ensure reflexivity.

The findings suggest several practical implications for screening and intervention strategies. Overuse injuries have been suspected to be caused by fatigue and coping with pain (Twitchett et al., 2010; Anderson & Hanrahan, 2008), which has now been confirmed by the participants. Since the participants' fatigue was primarily caused by the increasing workload, researchers recommend monitoring the internal training load of a dancer regularly, i.e., his psychophysiological responses

to training (Grove et al., 2013). Hereby, measuring the session rating of perceived exertion (s-RPE) (Shaw et al., 2020) might be an effective screening method to assess how dancers individually respond to increasing workload to interfere early at signs of prolonged fatigue. On the other hand, dancers need to be educated about the different forms of pain and how to appropriately cope with them, preferably already during vocational training (Anderson & Hanrahan, 2008). Early education about stress during vocational training might be beneficial in general since young professional dancers appear to be particular at risk of sustaining injuries caused by stress, as we can see in both participants. Other studies have also reported the greatest incidence and number of injuries for the youngest and least experienced dancers in the company (Allen et al., 2012; Bronner et al., 2003), who also sustained similar overuse injuries located at the foot as the participants (Sobrino & Guillen, 2017). While Allen et al. (2012) proposed that the transition from school to company might be challenging because of the increased technical expertise and fitness level demanded, the participants' experiences demonstrate that further factors (e.g., self-responsibility) expose this group to a particular risk of injury. This suggests, firstly, that dance students need to be prepared more thoroughly for their work in a professional company, and secondly, that young professional dancers might need a transitional phase with more guidance to adjust to the company life. Although working in a junior company is often considered as a transition and preparation for the later professional company, this was not sufficient in the case of the participants, who were both previously members of junior companies. While young professional dancers might need some more specific strategies, the teaching of broad-based coping strategies (see Noh et al., 2007) might be promising in general to give dancers various tools at hand that they can use to cope with various stressors. Nevertheless, these screenings and interventions are hardly expedient, as long as the stressors inside of ballet do not start to change. Previous studies have indeed shown a relation

between dance-specific stressors and injuries (Mainwaring et al., 1993; Noh et al., 2005), but the participants' descriptions indicate for the first time, where exactly future changes are needed the most. In particular, issues such as training periodization or how teaching style affects the motivational climate in a company must be addressed by ballet masters and directors to ensure healthy working conditions for the dancers.

Future research should focus on different cohorts and research designs to provide a comprehensive view of the connection between stress and injury risk with the aim to develop a ballet-specific stress-injury model. To ensure that the experiences of the participants are generalizable to a greater population, more qualitative research across different professional ballet companies, and dancers of different age groups and ranks needs to be done. Hereby, it might also be of interest to interview former professional ballet dancers after their career end, or ballet masters and directors to approach the topic from a different perspective. Once we see the bigger picture of potential injury risk factors, researchers should address these newly identified psychosocial factors quantitatively by using prospective study designs, preferably with repeated measurements (see also Johnson, Tranaeus, & Ivarsson, 2014). Additionally, further intervention studies, similar to Noh et al. (2007), need to be conducted to guide the implementation of prevention strategies in the companies.

Even though more research is crucial to fully understand the connection between stress and injury risk in professional ballet, all knowledge is pointless if we do not use it practically. For this, we need dance researchers who find ways to transfer and apply scientific knowledge into everyday practice. We need ballet teachers, ballet masters, and directors who are reflective about their work, and open to learn and change long-established traditions and structures. But most of all, we need dancers who are well educated and stand up for their own physical and mental health.

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Appendix

A. Study Flyer

Chair of Sport Psychology
TUM Department of Sport and Health Sciences
Technical University of Munich

TUM

DANCERS WANTED



I am looking for participants for my study on **how stress influences the injury risk in professional ballet dancers!**

Who can take part?

- You are between **18 and 30 years** old,
- You had a **dance injury during the last year** that forced you to take a **break for longer than 7 days**,
- You were a **member of a professional ballet company at the time of the injury**.

What would you have to do?

- Fill out a **questionnaire** about your general dance history and the specific injury (**ca. 15 min**),
- Discuss your injury and potential influencing factors in a **one-to-one interview (ca. 60 min)** → Via **Skype or Zoom** possible!

If you are interested in participating in my study or you have any further questions, please feel free to **contact me by email!**

Anja Ofenstein
M.Sc. Sport & Exercise Science, TUM
Email: anja.ofenstein@tum.de

B. Information Sheet

TITLE OF THE STUDY: Stress and Injury Risk in Professional Ballet Dancers: A Qualitative Study

I would like to invite you to take part in my research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or if you would like more information. Take time to decide whether or not to take part.

WHO I AM AND WHAT THIS STUDY IS ABOUT

I am a sport scientist and currently doing my master's degree (M.Sc. Sport & Exercise Science) at the Technical University of Munich. Furthermore, I am working at the Praxisgemeinschaft Pöhlmann & Götz where I support dancers with rehabilitation and training. During my study, I focused more and more on dance science, especially psychology, which brought me to write my master's thesis about the injury risk of professional dancers and how it is influenced by stress. Stress is known as a major risk factor for injuries in sport. Based on that, sport psychologists proposed a model that explains the stress-injury mechanism and how various factors can contribute to this connection. Even if this model is well proved in other sports, it remains unclear if it could be used to understand and reduce the injury risk in dance. I want to investigate if this specific model is suitable for dance by conducting interviews with professional ballet dancers. As a result, I hope to provide practical tips how this model can help reduce the injury risk of dancers in the future.

WHAT WILL TAKING PART INVOLVE

First, you will receive a questionnaire where you have to answer some multiple-choice and open-ended questions (duration: ca. 15 min). The questions will be about your history in dance (e.g. *At what age did you start dancing ballet?*) and about the specific injury (e.g. *When did the injury occur?*). In the second part of the study, we will discuss your specific injury and potential influencing factors based on the model (e.g. *How did you feel before the injury occurred?*) (duration: ca. 60 min). The interview consists of open-ended questions and will be audio-recorded. The transcribed interview will be provided for you to check correctness.

DO YOU HAVE TO TAKE PART?

Your participation in this study is completely voluntary. You have the right to withdraw from the study at any point, without further explanations or consequences. After collecting your data, you can withdraw within two weeks so that your data will not be used in the analysis.

WHAT ARE THE POSSIBLE RISKS AND BENEFITS OF TAKING PART?

Possible psychological harm that may arise as a result of participating in the research could be psychological distress, upset, or comparable emotional reactions. In such cases, you can decide if the interview should be continued after some break or if it should be terminated at that point. As mentioned above, you can withdraw at any time from the study.

Possible benefits of participating are deeper insights into your personal stress-injury mechanism. You may learn what personal risk factors contributed to your injuries in the past and how you can prevent future injuries. If interested, you can receive your personal results and practical tips after

the study. Furthermore, you will help the dance science community to better understand how dancers get injured and what we can do to prevent it.

WILL BE TAKING PART BE CONFIDENTIAL?

Participants' identities will be protected during the study by pseudonymized codes. A code book matching real names with pseudonyms will be kept in a secure file during the study, only accessible by me. Personal information that could reveal your identity as a participant will be removed from the study. Non-pseudonymized data in form of signed consent forms, filled questionnaires, and audio recordings will be collected and retained as part of the research process. Only in cases with serious risk of harm or danger to either the participant or another individual, a third party will be involved.

HOW WILL INFORMATION YOU PROVIDE BE RECORDED, STORED AND PROTECTED?

Signed consent forms, filled questionnaires, and original audio recordings will be retained in paper form or in a secure file on an USB-Stick, only accessible by me, until after my degree has been confirmed. A transcript of interviews in which all identifying information has been removed will be retained for a further five years after this. Under freedom of information legalization, you are entitled to access the information you have provided at any time.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

The results of the study will be presented in my master's thesis and the following presentation in front of members of the Chair of Sport Psychology, TUM. General results and implications, no specific data, may be used as teaching material for future screening and intervention programs for dancers and dance students.

WHO SHOULD YOU CONTACT FOR FURTHER INFORMATION?

If you have any questions you would like to ask before taking part in this study, please contact me by email (anja.ofenstein@tum.de).

Thank you for your interest in my project!

Anja Ofenstein

M.Sc. Exercise & Sport Science, TUM

Email: anja.ofenstein@tum.de

C. Consent Form**Project Title:** Stress and Injury Risk in Professional Ballet Dancers: A Qualitative Study

Researcher: Anja Ofenstein

Please tick box

1. I confirm that I have read and understood the information sheet for the above study. I have had the opportunity to consider the information, ask questions, and have had these answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason, and without any consequences for me.
3. I understand that all information I provide will be treated as confidential and will be pseudonymized.
4. agree to the audio-recording of the interview for the above study.
5. I agree to the use of pseudonymized direct quotes from the interview in the discourse and presentation of the study.
6. I agree to take part in the above study.

 Name of Participant

 Signature

 Date

 Researcher

 Signature

 Date

D. Questionnaire: Dance Background and Injury History

Dear Participant,

the following questions focus on your general dance background and your injury history. Please answer all questions regarding ONE SPECIFIC injury (criteria: during the last year, no dance participation for at least 7 days). If you had more than one injury that fulfill the criteria, please choose one. We will discuss your answers in detail during your interview.

Thank you for your participation!

Name: _____

Age: _____

1. At what age did you start dancing ballet?

2. At what age did you start dancing ballet professionally (i.e., member of a company)?

3. When did the injury occur? Please state approximate date (month/year).

4. How long have you been a member of the company when the injury happened?

5. What was your rank at the company when the injury occurred?

6. During what time of the day did the injury happen?

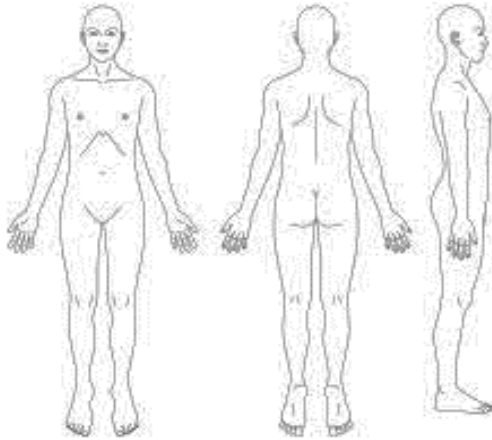
Class

Rehearsal

Performance

Other: _____

7. Please mark the location of your injury.



If known, please state the injury diagnosis (e.g., ankle sprain):

8. What was the type of the injury?

New injury

Recurrent injury

Other: _____

9. What was the cause of the injury?

Traumatic

Overuse

Other: _____

10. How long have you been fully absent from dancing because of the injury (i.e., no participation)?

1 – 2 weeks

3 – 4 weeks

5 – 6 weeks

7 – 8 weeks

Over 8 weeks

E. Interview Guide

Start of interview:

This interview is all about how your specific injury (the one you have chosen in the questionnaire before) happened and how it was influenced by different factors that are all related to stress. So, the questions all deal in some way with the general topic of stress and injury risk. The first part of the interview will be focused on the injury itself and the potential stress reaction that caused your injury, the second part will be about the factors that could have influenced the stress reaction. Are you happy to talk about this?

And just to remind you again that you can stop the interview at any point without having to explain why, and you can withdraw your data from the study within two weeks after the interview if you ever feel that you'd like to, and again without having to explain why. Are you happy with all of this?

Here is the consent form which contains details of how the data will be used and who will be able to read it. Have a look through the form and make sure that you are happy with what is on there. If there is anything you do not understand then please ask me. When you are happy, you can fill in and sign the form and give it back to me.

Thanks. Well, I wonder if a good place to start would be to talk about your injury? You answered in the questionnaire that ...? → **Start with first question**

Main Questions	Follow-up/ Clarifying Questions
Could you describe how the injury happened exactly?	What were you doing before the injury? In which situation did it happen?
What were your thoughts in this situation?	How did you perceive/appraise the situation in which the injury happened? How personally important was the situation for you? What were your thoughts about handling this situation?
How did you feel physically before the injury happened? (Right before/ some period before)	What physical symptoms stood out for you? Did you have any bodily/somatic symptoms? Could you explain these symptoms?
How would you describe your focus/ attention/ concentration before the injury?	Where was your focus on? Were you distracted? In which way?
What was going on in your general life at the time of the injury?	Have you been going through changes? Big events or more daily situations that have affected you?
What was going on in your dance life?	Have you been going through changes? Big events/ daily situations? In which way could the environment in dance have affected your injury, e.g., personal, structural, occupational factors?

How was your social life at the time of the injury?	How was the relation to your family, friends, the company? How would you describe their support at the time of the injury?
How would you describe your overall health and well-being at that time?	How was your sleeping schedule and diet? Did you take any drugs at that time? Did you notice changes? In which way?
Have you had previous injuries that could have influenced this injury? In which way do you think so?	Have you had comparable injuries, i.e., body location? Similar situations that caused an injury? In which way comparable?
How would you describe yourself as a dancer? What drives you as a dancer? How do you think this could have influenced your injury?	What are your goals, values, motivation? Do you think some of your characteristics made you more prone to injuries or instead prevented them in the past? If you know about these factors, what did you do to work on them?
How would you describe your mood state during the time before your injury?	In what kind of mood state have you been? What emotions were you aware of? In which way was your mood the same/ different?
Have you been practicing some sort of strategies/methods that help you in stressful situations?	In which way do they help you?
Take a moment and think about your injury and the time before: Are there any other factors that could have influenced your injury we have not talked about yet?	What else do you remember about the experience (of the injury?)
Is there anything else you would like to add or clarify?	Is there anything else I should know that you think is important?

End of interview:

If you do not want to add anything more, we are finished with the interview from my side. How do you feel now? Are you still ok that your data will be included in my study, now after the interview?

The further strategy is that I will transcribe your interview and send it to you by email. You have two weeks to check the interview for correctness and decide if you would like to withdraw your data from the study. If I do not hear anything from you within the two weeks, I will suppose that you agreed on including the interview. Are you ok with that?

If you have any later questions or you remember something that you want to add, please feel free to contact me. Then, thank you for your time and effort to participate in my study!

F. Transcript of Interviews

F.1 Participant 01

- 1 I: Ok. So, um, um, could you explain me like how the injury actually happened? #00:00:10-3#
- 2 P: So, last February, um when I was still dancing in [REDACTED] as a trainee, so I wasn't in a major company yet, I was still in an academy program technically. Um, it, it just kind of been randomly in class, I was on demi pointe and my toe popped, and it felt kind of weird. And then I came off and was like, it's ok, and then it started hurting more throughout the day. And then, um, it was kind of, it wasn't hurting as much and then it continued to hurt more and more and I went in for a MRI and I was having a bone contusion in my, like on the inside of the joint on the bottom. Um, but it was also last season when I had to be doing auditions, so I didn't take off time. So, it happened in February, I didn't take time off until May. And then took off nine weeks over the summer before coming here. #00:01:09-2#
- 3 I: Ok, so, summer break was completely off? #00:01:12-4#
- 4 P: Yeh, mhm (affirmative). Normal cross training, exercise, but not um ballet. Just reformer, bike, normal cross training. And um, I did all of the rehab in [REDACTED] there and then I came here and it was still a little bit, I could feel it but not nearly to this extent and then, I stopped feeling it completely for probably two and, twoish months. And then, recently during [REDACTED], we were running, um, the [REDACTED] every day, like three times a day, which is a lot of running and, um, impact on that joint. And then I started to feel it and I knew that if I didn't stop sooner rather than later it would have be worse. So, it wasn't a contusion this time when I got the MRI, it was inflammation in the joint and fluid in some of the capsules, um, so I stopped earlier than I did last year. #00:02:14-9#
- 5 I: Ok, um, so like it was when you first felt the pain again that you said, ok stop from here, or did you continue for a while? #00:02:27-4#
- 6 P: I felt it a little bit and I was like, well, 'cause there are some days where I might feel it and then I like go to sleep and it'll be fine the next day and I won't feel it again. Um, so I felt it for, I think like, I felt it one day and it was a little bit and then, the next day it was enough that I said I needed to stop. #00:02:45-0#
- 7 I: Ok, what did you exactly, um, do then? Did you really, um, end the class right at that time? Went to a doctor or? #00:02:54-6#
- 8 P: Mhm (affirmative), yes, so I, um, the second, I think it was the second day that I felt it, I took barre, and I, 'cause I woke up and I was like, ok I can feel it but we'll see if I get it, if I get the joint moving, get some blood going, how it feels. So, I just did the barre in class and immediately stopped and went to the PD at the ballet. And then settled a doctor's appointment, um, to go get an MRI the next day. #00:03:23-0#
- 9 I: Ok, um, so again it was like in rehearsals for [REDACTED] that it happened, that you felt it the

first time? #00:03:31-7#

10 P: Mhm (affirmative), yeh. And it was like a slow growing, like, ok it's there but I don't know. #00:03:39-1#

11 I: You continued a little bit ... [P: Mhm (affirmative)] and ok. Good. Did you, um, or what kind of physical symptoms did you have before? Do you remember anything? Whole body? #00:03:48-6#

12 P: Just my toe. #00:03:50-8#

13 I: Just the toe? #00:03:51-7#

14 P: Just the joint of the toe. #00:03:54-5#

15 I: Ok, um, have you had, um, any other physical symptoms, like fatigue or something like that before? #00:04:01-6#

16 P: Eh well we are dancers so (h) always kind of fatigued. Um, I don't know if I can pinpoint anything else now thinking back. I was probably very tired. And frustrated about having to do [REDACTED] again and again and again. #00:04:23-6#

17 I: Ok. Um, and, how do I say that. Ok, um, so when you say frustration, what were your thoughts like in this situation when you had to do it again and again and again and you didn't have a break? #00:04:43-4#

18 P: Just kind of thinking like, I don't wanna do this again, we just did it. It was fine, you're not giving us any corrections to do it again, you would just making us do it again. Without changing anything or giving us any notes. #00:04:59-0#

19 I: Who said that? Or like - #00:05:01-6#

20 P: Just the, the ballet directors, just want us to do, they, they would just say, ok again. #00:05:07-9#

21 I: And you didn't ask them why? Why they were pressuring so much? #00:05:10-3#

22 P: Yeh, yeh. And no one does. #00:05:11-6#

23 I: Ok. Um, so, um, how would you say you perceived the situation? #00:05:22-5#

24 P: (.) Annoying (h). 'Cause it's like, because ballet is so physically demanding, and it's like, ok we just did this six-seven minute piece, why do we have to start over? Um. #00:05:41-5#

25 I: Ok, so they didn't tell any reasons and you were just ...? #00:05:49-0#

- 26 P: Sometimes they would just be like, not good, again. #00:05:54-3#
- 27 I: Um, can you explain, or do you know why they don't give you any explanations? #00:06:02-3#
- 28 P: No, that I can't tell you (h). That I have no idea. #00:06:07-9#
- 29 I: Good, yeh that's another point (h). Ok, um, like during that time, like, let's say, like the days before the injury, when the injury happened, um, how would you describe your concentration or like attention during dancing? #00:06:27-8#
- 30 P: Um, probably a bit distracted. Definitely, and the minute I knew this study was like, involving with stress in dance, definitely stressed all the time but especially 'round the holidays and my family was about to come and having to run the show as many times and moving to a new country, culture, everything. #00:06:55-6#
- 31 I: Ok, like a lot of things - #00:06:54-3#
- 32 P: There was a lot of new things in the last months, um, and it sounds so silly, but like my boyfriend and I were kind of going through something around the same time, so it's like combination of stress about performing and about doing it over and over again and my family coming and things going up with him, it's like ... #00:07:23-5#
- 33 I: So, you would say like, the other non-dancing parts would affect your concentration in dance?
[P: Yes] You can't just say, ok I'm just here focusing? #00:07:30-7#
- 34 P: I can but, like, the moment I stopped dancing I was overwhelmed by everything that was going on. It's really manifested when I went to the doctor and got the MRI and got told I wasn't supposed to dance. I just like couldn't stop crying and was like, it's just two weeks, like you'll be fine, it's better to stop now but it was just so much happening all at once. #00:08:00-3#
- 35 I: Yeh, and it was just like the top of things - #00:08:03-0#
- 36 P: Yeh, it was like everything and then it came crashing though. #00:08:06-7#
- 37 I: Ok, now you feel better? #00:08:11-0#
- 38 P: Yeh, definitely more managed and yeh. #00:08:13-0#
- 39 I: Yeh, I know what it means to like get out of training and you really want to do it but in the end it's better. You know that for yourself but... Ok, um, good, so, um, but you say your concentration wasn't, um, like when you were actually dancing, you weren't unconcentrated? #00:08:34-1#
- 40 P: Yeh. #00:08:35-2#

41 I: Ok, you were, you were not distracted, making some stupid movements in this way?
#00:08:42-1#

42 P: No. #00:08:42-1#

43 I: No, ok. Good. #00:08:43-6#

44 P: I can usually kind of compartmentalize when I'm working and working when I'm dancing. And then like everything else might want to push that boundary but usually it's just like, ok I need to dance, that needs to be somewhere else right now. #00:08:57-4#

45 I: Ok good that you can, like, separate that. #00:09:01-9#

46 P: I'm very like (h) [makes gesture of box], everything in my life is like OCD (h), in a box, at its place. #00:09:08-4#

47 I: Ok not bad. Good, um. Do have anything else to add, like about the situation how the injury happened, how you felt at that time physically, mentally, your thoughts? #00:09:22-8#

48 P: Um (.). This time or the first time it happened? #00:09:34-3#

49 I: This time. #00:09:35-2#

50 P: First time I have more for, this time not as much, um ... #00:09:37-1#

51 I: Ok then just explain me how it was the first time. #00:09:39-6#

52 P: So the first time, it was in [REDACTED] and I had been a trainee at this company for two years, and they have been using me for everything, I've been understudy everything, having me going in to everything with the main company for two years. And then, come contracts, they said, we don't know if we have one for you, we will let you know in two months. That was December. Come February, um, I've been working on everything they talked about, doing what they wanted, still um, you know really working hard and pushing myself and then, I don't remember if the injury happened before or after the meeting but I had my follow-up meeting and they said, we're not gonna have a contract for you, with very little reasoning so I really don't know even now why they couldn't hire me. Um, and around the same time, so I hadn't gotten a job, I, um, at the time was still recovering from a minor eating disorder. Um, so I was still having a hard time managing food and all of that, so it was probably like I didn't have the right nutrients for my body either. Um, and then, my best friend from home got into a skiing accident and shattered his C5 and C6 vertebrae and is now paralyzed from the neck down. So, all of that happened at once and I, I don't know the exact order that everything happened in, but it was all within like a week or two of each other. So, it's kind of similar circumstances where I was like, everything started to happening at once and then I was injured. And so same thing kind of this time of year, when it's like, stress with my family and, who I love very much but they can be a little overwhelming when I'm trying to work and like, I need to have my work time and I need to have my schedule and my routine and then they come and they are like, let's go

do everything (h), let's go see things (h), let's go out to dinner all the time and so I might not like, eating everything that I normally would and like, having extra people there and like having to talk all the time and everything. Um, so both kind of instances, it's like there was a lot happening all at once and the injury occurred within that time frame. #00:12:09-8#

53 I: Ok, so you can see like parallels between the first time of the injury and now? #00:12:13-9#

54 P: Mhm (affirmative). #00:12:15-9#

55 I: Ok, good, um, I would focus now like more on the different factors, you've already mentioned some of it. Um, so, could you just summarize what was like going on in your general life at the time of the like second injury, the re-injury? (.) Um, you mentioned your parents were coming, so that was stress? [P: Mhm (affirmative)] Relationship? Um, so, were these, just, um, these two like the big changes happening in your life or was there something else that bothered you too? #00:12:55-8#

56 P: I mean those are the big, the big ones that definitely come to mind along with just the stress of working and having, um, such a physically demanding activity be your job, that sometimes by the end of the day you're just too exhausted to even consider anything else. Um, but I hadn't been like over-cross training, I haven't really been cross training much at that point, um, just because we had so many rehearsals and shows and, um, yeh, I mean I had the opportunity to cover a lot of roles that I wouldn't normally get as a beginning corps member, um, not performing them but at least learning and eh covering, just like another, um, just physical part of it, that's like, ok that's an extra rehearsal that you might not normally be doing, um. (.) But I can't really pinpoint any other like major stressors. #00:13:59-7#

57 I: Good and like daily life, like more little stressors, was something going on that stressed you? Little stuff? #00:14:09-6#

58 P: I mean not really other than the family and the relationship stuff which is like... [I: Big enough?] Yeh, big enough but also consistent small stressors. #00:14:20-6#

59 I: Ok. Um, so when you are focusing on your dancing and working life, um, except from the many rehearsals, what would you say was going on there? Like that could have been a stressor to you? #00:14:37-7#

60 P: (.) Um. (.) I mean them just telling us that we needed to do it over and over again and not telling us why and just saying, well it's not good. Which is like, seems kind of like a nothing but when you've done it so many times and you're still new, it's like, ok why are we doing this again and again and again. Um (.), there's always a thing in the back of the dancer's head that's like, do I look ok? Like, how is my body looking? Especially when you have had issues in the past with, with weight and body image. Um, it's always there, um, and it goes through phases, it's like sometimes you can really be like, wow I look great to like, and then, the next day you're like, um what? excuse me? (h). Um, which I had been feeling a little bit more recently, just kind of like, ok I don't how my body looks, do I look ok? like, what is going on? Um, which for like normal people, they might look and be like, what are you talking about? But when you

stand in tights and leotard every day in the mirror, you are like, it's just like yeh () [overlapping indistinct speech], immediately and in the company, they tend to be, um, very forward about how they feel about your weight. #00:16:02-4#

61 I: Ok, in which way? #00:16:04-7#

62 P: They will walk up to you and tell you to lose weight. #00:16:06-3#

63 I: In front of everyone? #00:16:10-7#

64 P: Well, not like, um, out loud but yeh, with people around sometimes. #00:16:17-9#

65 I: And you have been in situations like this? #00:16:19-6#

66 P: Yes, yeh. #00:16:20-3#

67 I: Did this happen, um, like before the injury, during that time? #00:16:23-9#

68 P: Um, no. Like in October. Um, but I was, was just kind of like, no I don't, I'm not gonna listen what they say because like, I've already had my own issues, like, I'm doing well, I'm eating well, I'm taking care of my body, like what they say isn't necessarily right. And it is hard because they're [REDACTED] directors, and they have that stigma, and that stereotype that they want that matchstick-thin dancer. #00:16:59-2#

69 I: Yeh but good that you can, like, be so strong and say something against it because not everyone can do this. #00:17:04-4#

70 P: Well, yeh. That's why the first time (h)... #00:17:10-1#

71 I: Yeh, um but, when you say you didn't feel that well in your body, can you see a connection between this feeling and the stress during that time when the injury happened? #00:17:22-3#

72 P: I don't think so, if anything was more after the injury happened because I already had been feeling a little like, um, I don't know, with my body, it's like when I got injured, then it was like, ok wait I'm not gonna be dancing, I'm not gonna be a little like work and like, I won't be using my body as much, like yeh, I can go to the gym but it is not as much as I was dancing every day. So, it was after the injury happened that it was more like, argh what if I'm gaining weight, what if my body changes? But I, it was like, like I talked to my mum and like, like close friend about it and they were like, no don't worry, if anything with your body does change like the moment [P snaps with fingers] you start dancing it'll be gone because that's how metabolism works but, I mean, I feel alright in my body right now and like, even though I've been off a few weeks. #00:18:17-4#

73 I: Good that they support you in this way. #00:18:18-2#

74 P: Yes, yes absolutely. #00:18:20-6#

- 75 I: Um, what would you say in which way, um, could have like the whole dance environment, could have affected your injury? Like ok, the repeating stuff but do you see other...? #00:18:33-4#
- 76 P: Um, I mean, they are very, very hard on us and they want, they want the most out of their dancers and they push them and they ask for a lot. But I don't know, it's just combination of like, overdoing it, um, with an injury that may not have completely healed the first time. Would be my best guess. #00:19:03-1#
- 77 I: Um, so how would you describe, like the motivational climate in the ballet? #00:19:10-1#
- 78 P: It can be very negative. Um, because the directors tend to be negative and tell us that we aren't good enough or that it's not enough and we need to do more and or just the same repetition thing. And then, everyone gets frustrated and then no one wants to do it and then, there's an, just a poor energy in the whole company because everyone's frustrated. Um, I don't know maybe that does tie in, I don't know, um... But it was definitely around the same time, where it was like no one wanted to be doing it, everyone was frustrated. There was like, there was just a very negative, I mean, energy, you could, you could just feel it that everyone was sitting there like... #00:20:05-2#
- 79 I: Ok. Um, but was the connection between your colleagues, was this still good or was this also like suffering from this energy? #00:20:13-0#
- 80 P: Um, it was still pretty good, so like, my close friends we still talk, we still hung out. Um, there was negative energy from my boyfriend who is in the company as well. So that's, that's also a factor, that's like, if we are having something in our relationship outside of work, we do still work together. Um, which can be hard 'cause then it's like, you have, you have to deal with it all the time. It's like even just seeing them at, in work and they are not like talking to you, then it's like, well what's going on there? But like, I need to separate that so that I can work. Which is easier if you don't work with them. #00:20:57-3#
- 81 I: Yeh, so you are mixing it up which you don't want to? #00:21:00-2#
- 82 P: Mhm (affirmative), yeh. When you are working however many hours, there must likely gonna be someone you like, where you spend your time. #00:21:10-8#
- 83 I: Um, would say this distracted you during dancing? #00:21:16-0#
- 84 P: Not when I was physically dancing but when I was not, yes. So, like, if I was sitting on the side, waiting for my piece or just like watching them do their role, it definitely would caught my mind. #00:21:39-3#
- 85 I: Ok (.). Um, are there any, um, so you mentioned like the motivational climate is not that good from the ballet masters. Are there any other like occupational problems, um, that stress you? I mean you are quite new in the company now, um, how was that for you, like the beginning?

#00:22:02-9#

86 P: Actually I mean it went really well for me, they, um, started putting me in the corps de ballet right away and um, definitely showed their interest in how they're like using me right of the back which was very nice, so I didn't really have to come in and like fight for it. They saw how hard the work was and so how I would fit in the company in, had been giving me opportunities since the first day essentially, um. So, coming into the company was nice and I immediately met some really good friends and, um, started dating my boyfriend, like day three of the season (h). 'Cause it just, you know, it just like clicked and then I was like, ok, like, great. Um, so transition was, was quite nice and I hadn't really, um, which I was, I was kind of nervous about coming over to the new culture, new language, new people. Um, but it ended up going very smoothly and I felt very comfortable pretty much right away. I settled in very easily. #00:23:12-1#

87 I: So also, outside from ballet you felt like, um, not stressed about the whole new situation here? #00:23:19-1#

88 P: Mhm (negatively), which I thought I was gonna be a lot more stressed about. #00:23:22-8#

89 I: Yeh, I mean it's a lot of new things, new country, language, so much happening. Um ok, so um, you already talked like about your parents and your friends. Um, how would you say was your social life at the time of the injury? #00:23:46-1#

90 P: Um, I think it definitely had slowed down a bit, and that's just with the holidays and my family coming into town and my close friends' family coming into town, so we weren't seeing each other outside of work. Um, and then, the whole thing with my boyfriend, so I really only saw him at work or if we went to dinner like with my family. Um, so I wasn't really spending as much time with my friends and things outside because it was the holidays and that's hard. When you're rehearsing all day and doing shows and trying to spend time with family, um, so socialize went back definitely, um, diminished a little bit. But then my family came so that side a bit, um, was lifted. #00:24:39-9#

91 I: Ok, so you don't think like that affected you, that you couldn't spend so much time with your friends? #00:24:45-5#

92 P: I don't think so. #00:24:48-9#

93 I: Ok. Um, how would you say, um, is their support? Like, um, for your dancing life by your parents, by your friends, by your boyfriend? #00:25:04-6#

94 P: They're absolutely supportive. My parents are all in, um, and they know that like this is what I wanna do with my life and they're completely supportive of that, they would do anything to help me. Um, and then like, I mean any friends from home are the same way, they're just so proud of me, that I've, you know, had a job and that I'm in Germany, and like everything is going really well. Um, and then, my friends here are all in the company, I don't really know that many people outside, just 'cause I'm not from here, I'm not German, I don't really speak

the language, I understand a lot of German but I don't speak it very well. Um, and when you're working that much you just don't meet people because you don't mix in any other circles. Um, but like my friends in the company are absolutely supportive and we, um, really help each other get through things and like if there's been a hard day at work or, um, whatever it might be, which is just nice to go to talk to someone who really understands and has been there with you and sees it all happening. The same goes for having, dating someone in the company, it's like they see what's happening throughout the day and they understand if you are like, oh well this, this and this happened in rehearsal and class, and they are like, oh yeh I saw that, like, this is what happened in mine, that people are acting this way. But then it, I mean, it can be difficult because you do work together all the time and then it's like, it's like, ok well we've talked about work, get off the work-side of it, you know. It's like, even at work sometimes it's like, ok you just wanna be spending time with that person but not be sitting at work. #00:26:46-0#

95 I: Ok. Um, but like right before Christmas when you didn't meet your friends or your boyfriend that often, um, did you miss like talking about work? I mean, or could you talk like exactly the same way with your parents about it or ...? #00:27:02-0#

96 P: Um, I can talk similarly with my mum about it, um, you know but sometimes she doesn't understand what I'm talking about, when I'm talking about like a specific rehearsal or someone in the company or the ballet masters, and then she's used to ask a lot of questions and that's annoying 'cause then I have to explain everything a lot. Um, so it's definitely easier to talk to someone who, who does work there and who really understands the ballet. Um, so I guess maybe but not really because we would still talk about it on and off ... #00:27:35-5#

97 I: And how supported did you feel like by, um, how do you say, by the company in the background, like the director, the masters and everything? #00:27:46-9#

98 P: Um, some of them are definitely more supportive than others. Um, and they understand that it, it is hard, 'cause they've been in a company, they've been in the company here, they've known for years, they understand that by the end of the day you are tired and but they do also have a standard to uphold for the company and for the performances. They do have to push us and sometimes it's not their decision if we are doing it again. So, say we do it once and the ballet mistress who is normally running rehearsals might just give us the notes and then we would do the sections she wants to correct. Versus if the director comes in, it's like watches and just goes, do it again, without her having said anything to correct us or him giving any notes. It'll just be, do it again. So, you definitely feel more support from some of the directors than the others. #00:28:44-6#

99 I: Ok, and like in the rehearsal when the injury happened, was it like one of the supportive ones or ...? #00:28:52-1#

100 P: Yes. Um, but I didn't say anything that day, it was the next day in class with, um, one of the supportive ones. But I just took barre and went in and talked to the, one of the, um, yeh he is kind of a company manager who we go to if we are sick, if we are injured, if we um have to go somewhere, have to do something. Um, so I went in and told him that it was hurting and that I was gonna go see a PT and schedule a doctor's appointment. And then, and then I told

the, um, woman who works with the corps de ballet who is quite supportive and, at first she was a little like, what you gonna tell me you're off if you go to the doctor? And I was like, I might, yeh, if it's, I might. And then I came back the next day and told her I was off and she was very, very kind, very supportive like, don't come back until you're ready, we need you in the corps, like, we want you to be healthy more than anything else, like, don't worry about it, we have people who know your spot that can do these last few shows of [REDACTED]. Um, you know, take your time, be healthy, like it'll be ok. So initially she was frustrated because there are a lot of people that have gotten injured in the last month and a half. Um, so I think it was just for her like in that moment it was like, argh I have to fill in another spot. And then, when she realized how upset I was about it, 'cause I was running in and I was crying, 'cause that was just everything, I was like overwhelmed and I didn't wanna stop dancing and I didn't wanna miss shows and it's like, I'm in a company now and I'm injured and I don't want them to think like, I just don't wanna do the shows, um, which obviously I do wanna do the shows, killed to do them. Um, so once she realized like, oh wait it's, it is something that needs to be taken care of and she needs to take this time off, she was very supportive and has been. If I've gone in to like pick something up or do anything at the ballet and happened to run into them at our other building where like all the Pilates, PT stuff is, um, she is very supportive and is like, how is it feeling? what is, what's going on? how are you doing? And asks more questions that actually help versus just like kind of yelling at me from across the stage like, what's going on? when are you back? Other than like, what are you doing to help heal it? how is, like how, how is your recovery? Which less supportive people do. #00:31:34-3#

101 I: Ok, good. Um, so, no one was pressuring you like to continue at that point? #00:31:40-8#

102 P: No. No, because I went in and I was like, I'm taking this time, it's an injury, it's similar to an injury I've had before, the injury I had before was very, like on the very serious side of it where I had to take off nine weeks and I'm not gonna do that again so I'm stopping now. #00:32:02-7#

103 I: Ok, so very clear? #00:32:02-2#

104 P: Mhm (affirmative). And because I went to the doctor and he was like, no, you are not dancing, he's like, this is a red, no do not dance. [I: Good that's -] So I legally cannot be, um, dancing, I can't be at work. Like, I can go in and like, get something from the dressing room if I need it but I cannot go in and dance. #00:32:24-0#

105 I: When do you start again? #00:32:25-4#

106 P: Um, my note says the [REDACTED], so next week. #00:32:31-7#

107 I: And are you planning to like just, how do you say, to dance some parts or you wanna go right at 100% right away? #00:32:42-1#

108 P: I mean I'd love to go in 100% (h) but I know with injuries in general not just this, um, that you do have to take time to go back. Um, so there are shows of [REDACTED] on the [REDACTED] and [REDACTED] and I'd really love to do the show the [REDACTED] because that's my birthday. Um, and I really wouldn't,

I don't wanna be sitting out on my birthday but I also, there's a, you know there's that thing in the back of my mind that's like, mhm will you be ready? are you gonna, is it gonna feel ok? Like, take your time. So, I've started doing little bits of class, like little bits of just barre, um, by myself and with my Pilates teacher who is also a former member of the company.
#00:33:29-8#

109 I: [REDACTED], right? [P: Mhm (affirmative)] Yeh, she was working her. #00:33:32-0#

110 P: I love her, she's my favorite. Um, she is amazing. I go to her like twice a week (h), even when I am dancing. Um, so I started that, like kind of trying to get back into it. So as much as I want to be doing the show on the [REDACTED], I, I was very adamant that I was like, I'll do the show on the [REDACTED] and I've been talked to anyone of the ballet about it, except like my close friends, 'cause all we're doing is very, it's easy, it's a lot of walking, and like, just piqués and it's not fast, there are not really jumps or anything. Um, but it does just depend on when I go back next week how it feels in that progression, um, because as much as I would love to do that show, is it, is it important to do a single show on my birthday or take that time to continue recovery and, and getting back into, to be ready for, say [REDACTED] in months. #00:34:36-5#

111 I: Ok, good. Um, so if you go - what, do you want to add something? #00:34:42-4#

112 P: I don't know, I was just like by the time I finished the answer I don't really even remember what it was (h) () I've just been talking. #00:34:48-0#

113 I: Yeh but that's totally fine, that's how an interview works (h). Um, so how would you describe your overall health and well-being before the injury? #00:34:57-5#

114 P: (.) I hadn't been sick, hadn't been sick in a long time. I was sick after I got injured (h), that was because my boyfriend was sick and then he gave it to me. So, he spent Christmas throwing up and I spent New Year's Eve throwing up, it was really fun (h). [I: Uh, nice] When it rains, it pours. It was like everything, it was like, fun cool, happy new year to me! (h) Yeh the fireworks were going off and I was just like in my bed and like, facetimeing my mum like (h), she was like, I wanna see the fireworks, and I was like (h), just lying there, ok bye mum, happy new year. She is like still in [REDACTED] and everything, um. But I hadn't been sick, I've been feeling pretty good, I didn't feel overly tired [P gets notification on watch: Oh lunchtime], um, I've been taking care of my eating and everything, so I felt, I mean I felt good. #00:35:55-9#

115 I: Ok, so your sleeping behavior was not different? #00:35:59-7#

116 P: It was pretty normal, yeh, I didn't, if anything it's more abnormal right now. Because I don't have to go to work, so I just like sleep in in the morning and I'm not doing anything. #00:36:12-6#

117 I: Yeh that's totally fine, you have to rest. #00:36:14-7#

118 P: Yeh, yeh. #00:36:17-0#

119 I: Um, so also you didn't change your eating behavior in any way before that? [P: Mhm (negative)]. Ok, good, yeh because as you said it, if you are not getting every nutrient, yeh like - #00:36:29-6#

120 P: Yeh I mean, I don't, I don't really think I had, obviously everyone goes through phases with like, well I'm gonna eat a lot of muesli right now or like, oh wow I'm gonna be more like into, like you know you go through phases with like what you are wanting to eat but it wasn't like I, um, I hadn't stopped eating. Um, anything that I normally had been, if anything I was probably eating a little more protein that I had been. #00:36:58-2#

121 I: Um, any difference like in how many times you eat or when do you eat? #00:37:03-5#

122 P: Mhm (negative). (.) No, I don't think so. I mean, it's like with work, it's like you eat on that lunch break that you are given for work and then, it is with like the shows some time, it's like, ok if I don't have a show, I eat at like 7, if I do have a show, I might be eating dinner at like 11. But that's normal for my life, it's like it's not a pattern I'm not used to. #00:37:30-7#

123 I: Ok. Um, were the rest periods changed during that time? Like lunch break, before performance? #00:37:39-7#

124 P: Mhm (negative). #00:37:43-4#

125 I: Ok, the same. Good, um, so we are going now back like to past. Um, you already said you had the injury before, um, it was the exactly same injury? #00:37:55-6#

126 P: The same feeling, yeh. #00:37:57-4#

127 I: Ok, um, when you just think about the whole situation, do you see similari- blap similarities, um, between both injury occurrences? #00:38:13-3#

128 P: Yeh, I mean I kind of mentioned it a little bit, but it was like, there were a lot of stressing things and frustrations or factors outside of ballet that happened around the same time. Um, so I, I mean I think they could be connected in, in the stress factor of my mentality with, with, um, my life outside of ballet. Which is why when I like, read the study, I was like, yeh actually that kind of relates to my life (h). #00:38:46-2#

129 I: Yeh, that's really good for me. Um, good, um, so now we go to a bit more psychological, personal stuff. Um, you just let me know if you don't want to answer it. Um, so how would you describe yourself as a dancer? #00:39:02-6#

130 P: (.) What do you mean? #00:39:07-5#

131 I: Um, like, what is your motivation when you are dancing? Or your goal? #00:39:14-7#

132 P: Um (.), I don't, I just love dancing. Um, especially on stage with the first show of Nutcracker that we did, even though, you know, they've been hammering us doing it over and over again

in the studio and when we started it on stage I was like, ok here we go, let's do it. Um, like the moment I start dancing it's like everything else kind of falls away, like that's when I feel like most myself and calm and like, genuinely happy in that time. Um, because I mean it does give different endorphins to your body and like, there are chemicals that happen in your brain that, um, cause, you know cause that, that feeling. It's like, oh wow I love dancing which isn't normal, isn't just ballet, it's like everyone that's why, you just gotta dance of your problems even if it's just like in your kitchen (h) like, um. But so for me it's just this absolute love for dancing and for what I do, and I, it's, it's always been hard for me to explain, 'cause (), because I don't know if I understand it completely but I know that when I'm not dancing, I feel like a part of me is like missing. Um, which I've been trying to make two different things, that like, ballet is part of my life, but ballet is not my life. Um, especially like at this age, coming into adulthood, you do have to have other interests and hobbies outside of like, this is my work, this is what I do every day, that's what I am. It's not just like, I am a ballerina. It's like, I am a person that enjoys these things but is a dancer. Um, what was the question? [I: Just continue] Why, why I dance? (h) #00:41:03-7#

133 I: But how is it going like for you, the separation that like -? #00:41:08-5#

134 P: It's yeh, I, it's working out, I'm getting there for sure, um, a lot better than like when, when I was like in high school and it was like, everyone knew me as "the ballerina". Like, oh, oh wait you're the ballerina, right? Like I'd be like, out at the store, like at a coffee shop, people were like, yeh, what you're [REDACTED], like the ballerina? Like that was like a tag to my name. #00:41:29-5#

135 I: So, the definition of you was -? #00:41:32-2#

136 P: Was a ballerina. And they definitely tried to like separate that more for the last years which is definitely happening, but a lot of people still do know me as like, oh she's a ballerina. Um, but I don't necessarily just think of myself as that, I'm not, that's not the only thing about me anymore. I definitely have different interests and hobbies and things I like to do outside of ballet that help separate like my work life. Because it is, it is work, um, which some people think is weird like, what do you mean, work? Like, ... #00:42:04-4#

137 I: Yeh, that's the thing with athletes, the others don't see it as a work. #00:42:08-3#

138 P: It is work. I, which I definitely see more now, here, because it's like I'm getting paid, these are my work hours. Like, when I'm done with that, that's work. Like, I go home, do my thing. Um, yeh but it's like, I'll say like, oh yeh I'm done with work at this time and I'll, like if I'm like scheduling a facetime with a friend from home, they are like, work, what do you mean? And I mean like with, with work, like at the theatre and they're like, oh yeh ok like ballet, and I'm was like, yeh but like it is my job, it's my work, I get paid for it, it's the same thing as like my mum's 9 to 5. Um, but like it isn't just a job 'cause there are a lot of people that hate their job. But it's really a, a job and a profession that I love doing and that I wanna be a part of and especially, um, over here with, um, how ballet is in Europe and how much the community loves it and how it's actually supported. #00:43:02-9#

139 I: You see a difference between [REDACTED] and Europe? #00:43:05-3#

140 P: Absolutely, yeh. [I: Really?] Yeh. No people don't care about ballet as much in [REDACTED]. Um, it's definitely more sport-oriented, Football, Baseball, Basketball. And there obviously are those people that who are lovers of the arts and that do support the ballet but, um, like here, it's a government funded entity. Whereas in [REDACTED], it's um, often a non-profit organization or it's funded within itself. So, it's like any ticket revenue they make goes to the ballet or any merchandise the ballet, the ballet. Whereas here it's, it is funded by the government in the end and like, we are government employees and we have government taxes versus in [REDACTED], it's not as funded. Um, so it is harder for companies in [REDACTED] like, the dancers don't make as much, they don't have as many benefits. And in [REDACTED], it's just different with like, health care and insurance and taxes. Because different governmental systems. #00:44:06-3#

141 I: Ok, so like the work conditions are better for you here, like -? #00:44:08-3#

142 P: Absolutely, yeh. [I: Ok, I didn't know that] I mean like, if I was injured in [REDACTED] right now, I would have to pay for my own doctor's appointments, my own MRIs, um, my own physical therapy, my own Pilates. But all of that is covered within my insurance or with the ballet. Where's like this, um, practice is connected, has an affiliation with the ballet. So, I can come here and get my rehab through the ballet versus having to go outside and find my own and pay for it myself. Um, and it, there are times when you're in the States, if you do get injured for an extended period of time which is also true here, but the period of time is much longer here in Germany. Um, that they can lay you off. So, they, you would not get paid during that period of time because you aren't working. Versus here it's like, in this period of time when I'm taking to, had my injury and was still being paid and still member of the company, it doesn't influence anything. At least I hope it doesn't ... Um, so it is very different, um, my insight here, and there, I mean like I can go into a shop and like if someone sees that I'm a [REDACTED], maybe like, oh why are you living in Germany? And I will be like, oh I dance with the [REDACTED]. And they are like, you dance with the ballet (surprised/reverent voice)? that's amazing! And it, it'll be like someone my age in a coffee shop and they know what I'm talking about. Versus in [REDACTED] when you say like, oh yeh I dance with um [REDACTED] which is the last company I was with, they be, some people be like, what? And I'm like, oh I'm like a, I'm a, a dancer, I do ballet. Oh, dance like eh, you know what I'm talk about like, So You Think You Can Dance, like the TV Shows and they're like, oh you do that? And I'm like, no I don't. #00:45:51-7#

143 I: Ok good. Yes, you also don't feel like that much pressure to come back earlier to work? #00:45:56-8#

144 P: Correct, yeh. If anything, the pressure comes within myself because I, I'm missing that part of it. I'm wanting to be dancing so badly. Because I do love it, because it is where I feel most whole. Um, so they, they wouldn't, they are not forcing me to come back, when I need to come back. Um, or like, you know they haven't said, you have to be back for this show, this this this, like, if I go in and tell them like, I, I don't think I'm gonna be doing that show, they might be for a little while but will say, ok we'll find someone else to do it but in the end they know like, ok that's her time to recover, to be ready. #00:46:39-4#

145 I: Ok good. Um, so (.), um, do you think like, um, as you described yourself now, like as a very passionate dancer, um, do you think that could have influenced your injury in a way? #00:47:02-2#

146 P: (.) Maybe. Um, because (.), I'm more prone than some, some like other dancers to just do it like, like I wanna be doing it all the time. And I'm like if I'm covering something, I might be outdoing it in the back or in the side. Um, because I love doing it and I, I put in the work. Um, and that's, I think that's a little bit of an [REDACTED] thing which I talked about with eh my fellow [REDACTED] in the company, that's like, that is more [REDACTED]. Like if you're doing it on the side, you might be rewarded for that, you, they might see that and will be like, ok wow they're really working hard, or in class if you're working, they can see that. But it's not always true here, 'cause with the, the masters that we have, um, because I don't think that's as much a thing in Russia, um, which then influences the company because there's a lot of Russians. Um, it's like, maybe it could have, you know like on top of running my own rehearsals doing, being, um, in other rehearsals as a cover and a second cast and doing that maybe on the side or they were like, ok this is, is the second cast ready? let's run it with the second cast. Where it's not something that I was performing but would still be rehearsing. So it's like, like an extra little block on it that's like, ok here is extra work for you to do, here is more pressure, more, not pressure, um (.), pressure, pressure in a sense of more work that you are having to do. Um, yeh, and they ask like, you want it? And I could have been like, no, but if I'm not feeling bad, if my body is feeling good, if I wanna be doing it then I'll do it. #00:48:58-1#

147 I: Ok, um (.), so I mean, when you are like also, do you do like the extra stuff on the side like you used to do it? You want, um, the other ones to see it or is it like also more for yourself that you have like high standards of yourself? #00:49:18-2#

148 P: Definitely more myself. I definitely pull myself to that standard where it's like, ok I need to be doing it on the side, at least try it. And part of it is like if you are a second cast then it's like you wanna have at least tried some of the steps, just in case they're like, ok this person got injured or they're sick or ... can you try it? 'cause you are here. Um, but it is definitely more of a, something I do myself. Um, than like the ballet masters being like, you're not doing it on the side, why aren't you? Um, so it, it is a choice that you make. #00:49:55-4#

149 I: Ok, um (.), but would you describe like having these high standards to yourself is, um, so more positive or like negative consequences or ...? #00:50:08-0#

150 P: I think you could say both. Um, positive because you do become a stronger dancer that way, you learn what you need to work on and you do have the opportunity to be learning new things that aren't always presented as a first year in a company. Um, but I do think it possibly can come off negatively that your body does then go into a state of, um, stress overuse. In my case that, um, you know it is a lot for the body, the take on all at once. Because we've done (.), we're not made for ballet. Um, you know, it's not like when humans were, when humanity began, um, they were like, yeh let's make them stand on their toes. It's not necessarily what our bone structure is built for and like, yes, we have been training our muscles since when we were very young to shape the muscles to hold our feet and our ankles and everything. But it is still, it's still isn't the most physically natural thing to be doing. Um, so in general if you do overdo it,

then your body is gonna revolt and be like, no no this hurts. #00:51:29-1#

151 I: Besides from like the, um, physical factors of having high standards, um, how is it like psychologically for you? #00:51:39-0#

152 P: (.) Um, I mean, yeh you do, you do really in head as a dancer and as a ballerina 'cause you see yourself in the mirror so you are worried about like body images and then, well there's somebody standing next to me that's thinner or has better legs, better feet, better whatever it might be. So, this is a very, it can be very competitive. Um, which is a psychological stressor and it's like, you do have to go into, into every day knowing like, ok I need to, I need to make sure I'm thinking about how strong I am and what I can do and not what other people can do that I am not as good at. Um, which comes natural with ballet because there are some people that just naturally jump higher or can naturally just like balance or do crazy tricks. Um, but it, it definitely can take a negative, a negative toll because it is hard all the time to be completely happy with your dancing. You know, it's like you may have done something they may be correcting you or you just correcting yourself and you're like, oh god why can't I do that? Or like it's something you've done in the past and you're like, why am I not able to do it now? And it does, it does take little tolls sometimes that, that can be hard. #00:53:04-2#

153 I: So, you would say like sometimes you're doubting yourself? #00:53:07-1#

154 P: Yeh, definitely. #00:53:08-8#

155 I: How was it at that time, I mean you were new in the company before the injury, was that different? #00:53:14-0#

156 P: Um, I definitely was more confident in myself once I got the job and when I came over 'cause it was like, ok I have the job and I'm like, someone has said you deserve to be a professional. And that really helped me feel that way and be like, ok I have a job, I worked my butt off to get here. Like, they didn't hire me for no reason. And especially when they started putting me into the ballet, I was like, ok they trust me to do this, they think I'm ready, like, I feel like I'm ready, I'm confident in doing it. Um, and definitely around the time of the injury maybe it was a little, I definitely had a little bit of self-doubt just in like how I was feeling dance wise. #00:53:53-9#

157 I: In which way? #00:53:55-5#

158 P: Because um, once you get into a company, there aren't as many people telling you like, oh don't forget to do that or like, make sure you're turning out or they don't really give as many corrections like in class. So, it's like you have to be your own teacher at some point and take your technique and your artistry and your dancing into your own hands. And then it's um, it's on you and, you know it's something you have to learn over time for sure and I've definitely talked to older professionals and teachers and they say the same thing like, it does just take a little bit of time once you get into a company to find your rhythm, to figure out how you need to work without someone telling what to do. Um, which I've been feeling pretty good about and then, (), I mean you go, everyone in life has their, their phases. Um, I think definitely a

little bit before the injury I was more in the phase of like, ok what are you doing?, like, work on this, work on that, like, pick it up. Um (.), which come, which comes with dancing as well. And comes with the profession. (.) I feel like easily it probably could have been a factor in stress and it's like a lot to hold, reasoning right before the injury. I mean it all makes a lot of sense to me (h) if there's any question whether your stress like influences injury then it's like, duh (h). #00:55:23-3#

159 I: Yeh it's actually no question but yeh -. #00:55:26-1#

160 P: A fact that's still needs to be proven. It's like mhm... Yeh you can quote me on that (h). #00:55:34-0#

161 I: Ok um, so what you've mentioned before, um, when you just have to do it over and over again and you don't know, really know why, um, you said it like makes you feel a bit out of control? Because you can't, um, decide for yourself or you don't get any explanations for that? #00:55:59-6#

162 P: Mhm (affirmative). Yes, because often times like, you may have run whatever it was and you're like, yeh it felt good like, cool. But it is (.), who knows, 4 to 14 girls or more doing it all at once so it might not be you at all. You may have done it perfectly, never better but there could be other people in the corps de ballet that didn't. So they're like, ok well, they might not necessarily be looking at you and saying like, you were not good, do it again, it's like, as a collective they say, you all weren't good or you all need to be doing it again. Um, so it's not necessarily a personal thing it's often because it is, because you are dancing in a group and because it has to be together and align, it has to be good and so even if you're align, if, if you are on your mark, if you do everything well, it doesn't necessarily mean it went well for everyone. #00:57:01-9#

163 I: Ok. But how does it make you feel when you just get like such a broad comment? #00:57:08-4#

164 P: Not good. Often times, sometimes you know that like, ok what but I did it well, I know I did well and sometimes that's like, what little thing you have to hold on to? Um, to know that like, ok I'm putting the work in, I'm doing my part, I know I was in my spot. Um, but even if you think that and then they just look at everyone and be like, not good. And you think like, maybe it wasn't good, maybe it, maybe I didn't do it right, maybe I wasn't doing it well. You know it's like, because it is a very broad statement and it's how it happens in ballet a lot of the time unless we're doing a solo role or unless they, they do point it out and be like, oh [REDACTED] you're align or like, make sure you're doing this, then you know it's, it's directed at you. But when they do give broad statements, sometimes it can be difficult to understand. #00:58:05-5#

165 I: Ok. Um, so like right before performance or when you have to do something that's important for you, um, how do you feel right before that? Um, like do you get performance anxiety or something like that? #00:58:19-4#

166 P: Um, usually if it's the first time if done something, so especially here because we don't do what's called stage calls. Um, so if it's a new ballet, we'll do them but if it's a ballet they've been performing already, so excluding only [REDACTED] this season, every role that I've done I have either learning very quickly in studio and someone has kind of taught me right away or I've learned from a video and then had to do it. And then never done the role in costume on stage with the wigs, with the makeup, never been on the floor 'cause the floor changes per performance. Um, you know, or maybe we didn't run it as many times as other things, it's, it is different than like doing it, ok I had a dress rehearsal, maybe my dress didn't go that well, um, like in the States there is a saying that I feel like everybody kind of knows that's like, bad dress good show. So, if you had a poor dress rehearsal, then like it means the show will go well 'cause you got everything out then. But if you never have a stage call, then your first time doing it on stage is a show. Um, which, which can be heart-racing and a little, um, it, it can make you anxious and a little bit stressed about it for sure. But then it's like, for me personally it's like, those moments when the music is happening before you go on or before the curtain comes up, it's like, you feel a little like tense and you're like, ok like, I know this, I know it so why am I thinking like, oh my god I have to go through the steps, I don't know them. Um, but then for me like once it's starts, I'm fine. All of that goes away. Like I'm like, ok yeh I'm good like, I got this. But there is, you know that moment before you, I mean it's the same with the moment before a test or before you travel, there's always something that's like, did I forget something? do I know it? Um, you know, so it's like, it is, it's a lot for a dancer to take on at a young age in a new company where you are being thrown into a lot all at once. Um, you know, everyone is, like all the other dancers and everyone is super supportive and understanding and they always come up and be like, you've got it, don't worry, like, have fun. And even, um, like some of the more supportive directors will be like, all the best to you like, like, have a good time, don't worry about it, you know what you're doing. Um, especially if they see you kind of like going over it a lot on the side or like if you're standing there kind of like, they might be like, you're good at it like, don't worry, you've been doing it in the studio, you're ok and now it's your first time on stage, don't, don't worry. Um, so there is a good, um, there is a good support system when it does come to new things and the whole company understands that the new girls are gonna be a little more, um, you know a little shaken by it (h). But I love performing. It's the best thing ever for me. So especially missing performances for me is like, argh (h). #01:01:22-5#

167 I: Um, and would you say you, um, can you reach like your, um, performance limit or height when you are on stage? You know, like the maximum? #01:01:36-5#

168 P: I'd () to feel that (). Um, just because I, it is still the corps de ballet right now for me, um, which is like, can be very hard and demanding. But I've never felt to the point where it's like, that's my max. Um, even the times where I like, I was at home doing lead roles or longer pas de deus, whatever it might be, I've never felt that, the, like in a performance being like, I can't do this, I'm done. Like for me it's always like, I know I can do it and I kind of know that this is what I want to be doing. So, it never felt like a limit on that. Definitely in rehearsals, yes, because, you know, you've been rehearsing if it's, if it's 8:15 at night and you're still in rehearsal and you've been at work. We, we have a, our schedule is like in the morning we go from 10 to 2 and then a break from 2 to 6 and then 6 to 8:30 some of the days in the week. So, it's like, some of those days where you go back for that 6 to 8:30 rehearsal, you're sitting at home, it's

dark because it's winter. You go back and you're like, I don't want to be doing this rehearsal right now. And then it's 8:15 and then they're like, ok do it again, and you're be like (.), I can't, can't do this mentally, like I'm gonna lose it. Um, which was definitely the case leading up to the, the injury that it was like, a lot of like, can I do this again? can I physically, mentally do this again right now? #01:03:11-2#

169 I: So, you were just exhausted in every way? #01:03:13-5#

170 P: Yeh, definitely. Just like mentally, emotionally, and then like normal physical, like my body is tired, I wanna go to bed, I don't wanna go back when it's 6 o'clock and it's dark outside, you know? #01:03:25-0#

171 I: Yeh, I understand. Um, how would you describe your overall mood state right before the injury? #01:03:34-8#

172 P: I mean I kind of said like stressed and ... Not as stressed as I would say like worried about like the whole boyfriend thing. I feel so funny saying it every time I'm like, [overlapping distinct speech] it's like so dumb but it's life. It's like, shouldn't be that big of a deal but it is because it's something that matters and that you care about. Um, and that's never the wrong thing if you care about something. Um, yeh so it was like more worried about like, if my family felt like I was spending enough time with them, if they, if I was being as kind to them as I could be because when I get really stressed about things and there's a lot going on in my life I know that I can snap, with my family especially because it's like they know me, they know my buttons, they know my triggers. And it's like, they still tend to push them (h), um, because they love me and because they want to be spending time with me and, and they've gotten better with it over the years, um, but there are still times where they'll be like, let's go do this, let's go do that, and I'm just like sitting on the couch like, I don't want to. Like, let's go, we are going, come on we're leaving. And then I'm like, I'm not going. Or I'll just like be like, no Mum (angry voice), like, just like get mad at her. And I'm like, sorry, that's like unnecessary, it's like weirdly emotional. Um, I can't think about (.) I think I also had my period right, right around the time (h) [I: Good combination]. I think that happened right around the same time as my injury, so I was like already, like normal emotional, hormonal whatever (h) [I: Yeh if it comes up]. Yeh, and then, you know, my family is there and then like dealing with my own hormonalness and then they're pushing buttons and then the boyfriend and then being like, ok well why aren't we talking as much? why aren't we hanging out? like, what's going on there? But like we are at work all the time, like we are stressed, and like, we both have our own, we both have our own lives and stresses that then like, if we are dealing with that on our own and we don't, we are not talking, then it's like, ok I don't know what's going on in our relationship. And like my family is there, so we are taking, I'm trying to like take time with them but also like, manage everything in my life and it's just like very overwhelming, is kind of the best way to put it. Um, and so like definitely leading up to that I was overwhelmed but very, very happy to have my family there and like fell, um, it's something I always like, when I'm with my family is there, I feel like there's a part of me that comes with them. And then when they leave there's like a little piece of the puzzle that's missing that I, I might like only act a certain way with them. It's like I'm only that weird with my family. But then like, you know it's like I want that, I like that part of me, I like that side, I like who I am when I'm with my family. But it's really only with them

that I'm like that. A little cuckoo (h), when it comes to my family, I'm a little crazy. Um, you know so it's like, I'm so happy to have them here, there's also like, ok I need my own space, I need my time, I need you to () in my apartment 24 hours a day like, um, so I think overwhelmed is the best emotion to put on it before the injury. And then when it happened it was like, oh my god, what could happened, what else could be happening right now, like, how could it get worse? #01:06:59-8#

173 I: Ok, um, how would you describe like your personal stress reaction, like what happens physically, mentally? I mean you are worried? #01:07:07-2#

174 P: Yeh, so I feel like, I get worried and definitely break out, um, when I get too stressed, I get a rash on my neck. When I get like really, really stressed which, which hasn't happened in a while, probably since I was in school, like with tests on top of ballet, on top of everything. Um, and I know that like when I get stressed, I don't necessarily take care of my mental health the most and I think it's a pretty common thing that like when you're doing well, you don't necessarily think that you have to be taking care of your mental health. It's like, I'm happy, everything is good, and then it's like, when little things start to happen, you're like, mmh (sound), and then you do start to slide into a, I wouldn't say like depressive but into, into like having a hard time, like dealing with things and like, I definitely don't take care of my mental health as much as I should sometimes and I know that and that's something I'm learning to do and take care of, um, where it's like, maybe at the end of the day I just need to go home, I need to call my mum, and I need to take a bath or just like go to bed early, whatever it might be. Um, you know that's something you learn over time about yourself and especially coming here in the new job, new people, it's like, ok well I need to know what I need, um, to make sure that I'm mentally and emotionally healthy every day as at least to the best of my ability. #01:08:36-3#

175 I: And would you say you, um, took enough time for yourself during the injury? #01:08:42-0#

176 P: After the injury, yeh I've been taking a lot of time to do what I - #01:08:45-9#

177 I: But before? #01:08:47-7#

178 P: Probably not. Two weeks then, um, you know it's just something I, I still don't necessarily know exactly what I need to do for myself, whether it be like maybe talking to someone outside of like my mum and like close friends, 'cause sometimes it is just like, you need something, you needed a friend aspect and it's like, I, I'm still learning how to take of myself which is like normal, I'm 20, I feel like, um, you know, but it is also like, you wanna be spending time with people, you wanna be happy like, you don't always understand why you don't feel like doing anything. #01:09:26-7#

179 I: OK, so what are like your strategies to deal with stress? #01:09:31-0#

180 P: Um, definitely talk to my mum 'cause I like immediately just kind of vent and like let everything out and then she's like, ok, like, how are you feeling now? what's going on? do you

just wanna vent? you want me to give my opinion? you want me to talk about? or do you just wanna like talk and then like hang up the phone and be done? Um, and I'm the kind of person where it's like, if I'm having a hard time about something or I'm stressed or I'm worried, I sometimes just need like someone there with me whether it be like my mum or my boyfriend or my best friends, like I just sometimes need someone to be there and like give me a hug and be like, I don't know what's going on but like, you're ok. Um, which is definitely something that I like, I had been needing and, and I needed that, but my boyfriend and I were like going through something like, didn't really know what was going on there. Um, and so I needed that from him but he couldn't give it to me in that moment 'cause he had his own, he was having his own stresses, his own things and we're very different in that sense that like, I just want someone there, there with me whether we are talking or not and like, it's just nice to have, um, someone. But he's kind of the way that's like, he might just need his time apart for a second and then he'll come and talk when he is ready. So, it's learning, learning to take care of yourself but also learning how to be in a relationship with someone all at the same time. Um, but I know that like, I need to just like go home at the end of the day sometimes and just talk to my mum and like, read a book or take a bath or I'm an old woman and I do embroidery like stitching (h) so I don't know () and I'll be like I do, um. But like sometimes it's just like letting your mind go somewhere else and for me like reading is a really good one, as I can kind of like get into a different world and like be part of that and like somehow my stresses go away and I know, I know from me that if I'm really stressed and worried about something, it'll be like I'm reading but I've read the same page like three times, I haven't comprehended anything. So I know for me that like if that's happening that I really just need to like, maybe talk about it, maybe just like sit there and let my thoughts go, like go crazy, be upset, be whatever and then like take a bath, go to bed, wake up in the morning, start over and be like, ok this is, this is I know what I'm struggling with these things like, trying, trying not to let those manifest into every moment of your day. Which is like, things I know I need to do but I'm still learning. #01:12:01-8#

181 I: Ok. Um, but could you practice them during that time before the injury? #01:12:06-8#

182 P: I don't really think I realized them before the injury until I had, until I wasn't dancing. So I didn't, because when, you know when you're going non-stop all the time, it's like, ok I get up, I go to work, I go to lunch with my family, I go back to work, I go to dinner with my family, I go home, I go to sleep. Or like whatever it might be in the day and it wasn't really until, until I got injured and then like took the time off that I was like, oh my god I'm so overwhelmed right now, there's so much going on that I can't even, um, I can't cope with all that right now. And it's like, it, I look back at it now and like, it really isn't that much, why are you freaking out? But it also is like, ok in the moment clearly my body was like, no you're done, stop. #01:12:55-4#

183 I: Yeh, I mean it's also phases, sometimes you're ok and sometimes you're not that resilient. #01:13:00-2#

184 P: Yeh, it's just a normal mentality that everyone goes through. #01:13:05-7#

185 I: Have you ever tried some mental relaxation techniques? #01:13:09-3#

186 P: Tried meditation like last year, it's not my favorite. I have, I tend to have a harder time shutting my brain off, um, which I know that meditation helps with that but sometimes it does feel like, ok I'm just sitting here, thinking about my breathing. So I, I don't know, for me like getting out of that headspace is easier if I'm like reading versus like if I sit there like meditating and trying to better, or if I'm just like writing, if I just like write down everything I'm feeling then it's like, ok it's all, it's all out on the page and it's kind of easier for me to understand if I've written it out of if I've talked to my mum about it. #01:13:58-2#

187 I: (.) Good. Then, um, just think again, is there anything else like another factor that could have influenced your injury? #01:14:07-1#

188 P: (.) Um, for a while after I got injured the first time and over the summer, I was taking a vitamin called Glucosamine chondro- I don't know I just got my bottle [shows bottle]. Glucosamine Chondroitin. #01:14:26-8#

189 I: Ah ok, yeh. #01:14:29-5#

190 P: Which helps with like, um, joint pain and like mus-, and um like the cartilage in the joints and I've been taking that and before I've had the injury, I have run out. But it was something that my doctor at home was like, ok well, like, take this for a while. And I didn't really know if it had made a difference or not. Um, but then I realized like I kind of run out of it and I got injured. So, I don't know if it has any connection or not. But we got more (h). So, we'll see if I, like when I first start taking this again and like continue taking it over time if that does help the joint. #01:15:11-5#

191 I: Ok, anything else? Like mental stressors, emotional stressors? #01:15:17-4#

192 P: Mhm (negative), I don't think so. Not that I can pick up one right now. (.) The holidays, normal holiday stress (h). #01:15:30-1#

193 I: Yeh, that's true. Ok, um because I think we're done with the interview if you don't want to add anything else? #01:15:43-2#

194 P: (.) I don't think there is anything else. #01:15:48-0#

195 I: (.) Ok, then let's stop this.

F.2 Participant 02

1 I: Ok, good. So, um, for the beginning, um, can you tell me how the injury exactly happened? Like, in November? #00:00:13-7#

2 P: I don't know how to tell you exactly but I, I started to rehearse some ballet, is [REDACTED] and it was being fine but when we so close of, of the performance of [REDACTED], we start with another rehearsals to [REDACTED]. That the first show, it will be 15th of December. So, I started to rehearse [REDACTED] with [REDACTED] together and with class. So, it's a mix when I start to rehearsing this [REDACTED], I start to feel like the, um, like something heavy inside my demi-pointe and I didn't know how to explain it. So, I don't know, I just think it's any pain, it's gonna, it's a period of the time. I started to take it easy a bit, I did class like I didn't jump but in rehearsal, I was, I was giving my 100%. Um, because when I dance it, and () [REDACTED] because I, maybe I could be, the possibility to take a demi-solo part, something like that. And was so half this [REDACTED] and the first show in [REDACTED] was, I danced already with pain but not much. The second one a bit more pain and I start to, this finish, um, [REDACTED] finish in November, wait no, in December, I think like this 2 or 5 of December, the beginning of December is the last show of [REDACTED]. So on through this date I start to just rehearse [REDACTED] and until this, I give more, um, I push more in the rehearsals so, I remember like, approx- um, the date 10 of December, 9th something like that, I didn't remember exactly but between these, I feel some, I was rehearsing and I feel like some shock in the, all, all of my foot. I think this was the point like, that explode the injury like that broke the, the bone, I think. And I start to just rehearse and take more easy the class after this and I give more physio, I did more physio but nothing, nothing helped me. So, I danced two, three shows of [REDACTED], 15, 17 and 18 I think, I don't remember the date exactly but the, for the first show I, I give up, I talk with my ballet master and I told him I can't do more, it's so painful, I will go to some doctor. And I saw the doctor, I think 16 of December, I did my MRI 17, in 17 I started to be off, 17, 18 of December, I discovered my stress fracture in my metatarsal so I'm off until this date. #00:03:34-9#

3 I: And, so when you felt this shock, you said like around the 15th it was -? #00:03:41-9#

4 P: No, around 10th. #00:03:43-8#

5 I: 10th? #00:03:43-5#

6 P: 10th, 9th, around this date. #00:03:46-7#

7 I: Was it like a, or do you remember a specific movement that caused this-? #00:03:51-3#

8 P: Yes, a grande, I do a pas de chat, grand pas de chat but that be different because I was like in élevé with, with two legs and I was preparing like open the right for arabesque and pas failli and did the grand jeté. So, when the pas failli, I take all my power of the right foot and jump off the right foot, just with the right foot because with the left foot it was pas de chat grand jeté. When I did this, I feel the shock in the air and I, that I fall for it. #00:04:27-2#

9 I: Ok. Um, ok. So, at that time, it was like a lot to do? A lot of rehearsing? So, it was - #00:04:38-4#

10 P: As kind of, kind of is not, I think is not a lot but every rehearsing that I had, I like given 100%, I'm pushing me a lot and I like, my body was tired. In one case, like I didn't comment, so I start the season here in September but in [REDACTED] we have the season different, we start the season in February and finish in December. So, I start the, I, I graduate in my school in December, um, 2018, so I had some exchange or um, exchange I can say? Exchange to [REDACTED] and I didn't, I just had two weeks to the break in December to like the new year, like 15 December to New Year and I went to [REDACTED] to work for one month. So, I work in [REDACTED] in January, um, the January, whole January in the, in [REDACTED] in the [REDACTED] and I come back to [REDACTED] and start to work 4 of February. So, I work, um, I didn't have two weeks after my graduation to break and more three days and I work like directly until 31 of August and I start here 4 of September. So, I didn't have break in this year, the whole year 2019. So when I came here it's not actually a lot, it's like ok but I was new in the company so I really, every time, every rehearsal, every class I would like to give my 100% for that they see my potential. So, I think that's what I do, the wrong way I did. Because I think we need to respect our body and to stop when we need to stop and the class is like a malo-, mono-, um, -? #00:06:47-2#

11 I: Ah you mean like always the same? #00:06:49-0#

12 P: No, no, the class for ballet dancers I think is of course to improve every day but it's more like to getting in shape, to... You don't need to like to, every class give your best, to like exam in school, no you can like, um, take it easy sometimes, and I didn't know that like... #00:07:13-4#

13 I: Ok, so you were at your 100% all the time. #00:07:15-8#

14 P: Yeh, every time, every time I was on 100%. #00:07:19-7#

15 I: Um, so like, before you noticed the pain first and when you had like this time when you knew there was something, what kind of other physical symptoms did you experience? #00:07:33-1#

16 P: Sorry, I didn't understand. #00:07:34-7#

17 I: Um, so how did your body feel? Like during the time of the injury or before? You know what I mean? #00:07:45-0#

18 P: So, before I was so tired. #00:07:46-9#

19 I: So, you were tired all the time? #00:07:50-0#

20 P: Nah, before? Before the injury? Before the time off? #00:07:53-8#

21 I: Yeh. #00:07:55-0#

22 P: Yes, because, how can I say, every time I'm 100% so my body always tired. #00:08:03-6#

23 I: In which way? How do you feel the tiredness? #00:08:06-3#

24 P: Heavy, I feel my body always heavy like, every time I need to go to physio to have massage in the muscles, in the body, in the back and everything. Because also my lumbar is a bit, I, I have something that I always need to take care. So, yeh before the injury I was feel like so heavy because I didn't know how to manage this, this way, this, every single day you know? The way I did to work correctly for, for a healthy work, not for like, like a (tract?) or something like that. #00:08:47-8#

25 I: Ok, so you were fatigued? #00:08:49-3#

26 P: Yeh. So after the injury like I, I start to do more gym because I have, I, before I didn't have energy to go like to the gym or something like, after I'm off I like feel so, so much energy and I can like to give more attention to another part of my body. So, I started to work on my upper body in the gym or something, a bit of my legs, not too much. But after I feel so good, actually when I come back, the first week when I come back, like my barre was so good because I think all of my muscles, it's so like new, I don't know how to explain it. My, I think for my foot it's not good but for my body, for my mind this time, the time off, that was good to my body. #00:09:46-8#

27 I: Interesting. #00:09:47-3#

28 P: Without my foot, for sure. #00:09:48-3#

29 I: Ok, um, so like all of the questions are focused on the, the period of your injury, like when you noticed it first and when, when it then progressed that you were completely off. You know what I mean? #00:10:05-5#

30 P: Um, no. #00:10:06-0#

31 I: Um, so, you noticed it first in November [P nods] until the doctor diagnosed it with the stress fracture, like this time, this whole time we are focusing on. #00:10:17-0#

32 P: Oh, ok #00:10:18-1#

33 I: Mhm, just for, for the last question, I didn't explain, sorry. Um, so in that time, how would you describe your concentration during dancing? #00:10:35-3#

34 P: I don't know how to explain exactly but, um, sometimes I just focus on doing it, the choreography or something like, I feel the pain but I feel, I think my brain, I don't know, like try to hide this pain. Because I wanted so much to dance, to show, to like, and I think the, my brain sometimes block it, this pain, that I didn't feel it. But I always knew that the pain was

there. You know what I mean? #00:11:14-7#

35 I: Yeh, yeh. #00:11:15-1#

36 P: So, yeh, I try to focus just in dance and just to, I don't know, because I, I did with the pain, the pain was disturbing me but the same way I did, you know, I think there was () that I did. #00:11:38-1#

37 I: Um, would you say, or have you been distracted by other things in training? Like your mind was going somewhere else? #00:11:50-9#

38 P: Sometimes, of course but every time I try to focus on to my class or something like that. #00:12:02-7#

39 I: Ok, that's fine. So, you can really - #00:12:03-4#

40 P: Just at the beginning of the barre, sometimes my head is not at place but after I just come back. I think this happens for everyone. #00:12:12-7#

41 I: Yeh, no, that's totally fine. Um, ok, so last question about, um, because these questions are about the stress reaction that could have caused the injury. So, um, bit difficult, but how would you, or what were your thoughts in this time? #00:12:38-3#

42 P: My socks? #00:12:38-7#

43 I: Thoughts, yeh, like you were rehearsing so much, what were, what was, were you thinking at that time? You know what I mean? Like in your head? #00:12:49-3#

44 P: Why socks? Ah thoughts! #00:12:51-8#

45 I: Yeh thoughts, sorry #00:12:51-9#

46 P: Sorry, sorry, ... #00:12:53-3#

47 I: No, no, my - #00:12:53-2#

48 P: No, my English is not ... my thoughts. In this time that I feel the pain, before the doctor ...? [I: Mhm (affirmative)]. My thoughts was being that, the focus on the [REDACTED], to get, to, my focus would be, so hard the choreography I was rehearsing and I was completely new to learn everything and I would like to (), like to show that I can do it and to get some show because we have actually I think 9 shows, 7 shows, a lot shows of [REDACTED], so maybe I would like to, to got some show. I think if the director saw me like doing it good that he would give me some show. And I think just something like, my thoughts on it in this time. #00:13:56-1#

49 I: So, it was like, um, also an important time for you [P: Yeh] you would say? Ok, um, but - #00:14:05-7#

50 P: It, it could, it could be a big step to me in the company. But it wasn't. #00:14:12-4#

51 I: And, um, like, were you like confident that you could handle this situation and -? #00:14:23-9#

52 P: Yeh, yeh. I just focused to clean and clean the more details, because I think like the choreography already, already, could, um, do it. But I, I had a lot to clean like details and arms and, I think that's my focus and my thoughts in this time. Every time I was like to the ballet masters to ask for corrections, to getting better more fast. #00:14:56-6#

53 I: Good, um, do you have anything else to add? Like how the injury happened, something special that you remember? #00:15:05-8#

54 P: Maybe the jokings after the rehearsals. #00:15:15-3#

55 I: What do you mean? #00:15:15-8#

56 P: Joking, um like, how can I explain it, when I put some music and start to do things or some fouettés or some () or big jumps or something like that. After rehearsal, like 8:30 of the night when your body is like exhausted, but you are still happy and doing things with your friends, something like that. And the miss of attention in the, how you work in the class, how you are like arriving () with the jumps. #00:15:52-4#

57 I: Could you explain this more? Like, miss of attention? #00:15:57-9#

58 P: The miss of attention? You know what I mean miss of attention, is correct to say? #00:16:03-0#

59 I: Yeh, yeh. No just - #00:16:03-2#

60 P: Miss of attention like the big jumps exactly, when you are arriving of grand jeté, you need to arrive like demi-pointe soft and then sometimes it's just, um, push it, or, how I can say... Do the grand jeté without thinking in the technical, just do to do it and arrive with like, um, like a shit you know. No, yeh, I don't know how to explain it. #00:16:37-9#

61 I: Yeh, you are just not like being, paying attention to - #00:16:41-5#

62 P: Yeh, yeh, paying attention to do the correct technical, you know. Like just, how can I try to explain like, um, confident with your, your shape or physical or something like that, like I am, I have this stretch in the, part of the [shows movement]? #00:17:03-6#

63 I: Yeh, split? #00:17:03-7#

64 P: The split. I have, so natural, so I just will like Tombé, (), jeté and not thinking, so just do it, not have the correct way to do it. And I think just do the, the jumps or... Either way the, the

class without the miss attention that can be help for the injury coming up. #00:17:31-0#

65 I: Ok, but this miss of attention caused by your tiredness, by your fatigue or was it just because it was the end of the day and you were just ...? #00:17:44-5#

66 P: I would mean just in the end of the day, but in the class, in the beginning of the day I also... it was like a lazy thinking, like a lazy body or, I'm not that I mean exactly I'm tired so I just will do to do, no, maybe I'm not tired but I just do to do because I'm lazy something like that. Or, something like, um, laziness and you do just, you do completely with your physique, or your shape like with you good, just do it without thinking the ways. You can be like, or you can work in the wrong way if you feel like that. #00:18:38-4#

67 I: And you had the feeling that happened? #00:18:40-5#

68 P: I had, sometimes not every day for sure. For sure not every day. But sometimes yes. #00:18:50-0#

69 I: Ok, um, so now we would focus more like on the factors that could have influenced, like your stress at that time. Um, so what was going on in your general life in that time before the injury? #00:19:10-1#

70 P: Before the injury? #00:19:11-9#

71 I: Before you noticed the pain. And then when you noticed the pain. #00:19:17-0#

72 P: Ok, what I did in this time? #00:19:21-1#

73 I: Were there some changes in your life? #00:19:24-4#

74 P: Yeh for sure, like, I, I never lived before in another like country just for the bit. I lived like in [REDACTED] before but just for two months and a half, in [REDACTED] just for one month. So I had this feeling that my life is completely changed now because I have the contract here for two years in the moment, so this is when you, when the pass of the year, the year, but it's completely changed in [REDACTED]. Another country, another language, another... real work because before I worked but is a junior company of my school, it's like one more year of the school, so like this. We don't had, we don't had this contact with a professional, professional company, no, we were a professional company but not exactly, as we are junior company. So, here is my first professional company. Um, my English when I arrived here, I had, I had so much notion, I understand but sometimes I couldn't speak like, it was improving. I don't have so much problem with, with Germany because in the theatre we just talk in English. But here I was, I was feeling these changes in my life. Yeh... other friends, um, I don't have like so many friends that I had before in [REDACTED], so, it was a period, a period, can, could be like difficult period. But actually, I had so much things good in this moment, new friends and this stuff. One thing is balance and other things compensate other things, so I just feel like every day is one I learn something. In [REDACTED] is not like this before, no. Every day I pass here in Germany, in [REDACTED], in this theatre I learn something new. Because it is completely different to me, so I had this feeling before...

#00:21:35-9#

75 I: Ok, um, so it was just, it was good stuff, but it was a lot of new things for you at that time?

#00:21:45-6#

76 P: Yeh, yeh of course, but it's tough also because when I start here, I didn't dance. These first shows, they don't put me to dance, just to learn because they, they really didn't know how I work, you know? So, I start to dance in the, I think in the third show, the third ballet, they have like [REDACTED], I didn't dance like [REDACTED] for example or [REDACTED], I just danced after. So, this for me is a bit weird because, in the beginning, because before I was dancing a lot there. So, I start here, and I see people dance, I'm not so this is a bit uncomfortable in the beginning because after I start to dance, I didn't stop so... #00:22:31-4#

77 I: Ok and how did this make you feel? Um, like, having to sit on the bank, like this at the beginning? #00:22:40-4#

78 P: I don't know exactly just... I'm upset that the fact I'm not dancing but also, I understand them, they need time to, I need time to like, how I can... to adapt of this company, you know? I, I needed this time, I think if they put me to dance [REDACTED] in the first show, I wasn't prepared so... I would fucked it up at the stage. Yeh, but in the moment I was upset. But at the same time, I could understand for sure. #00:23:21-6#

79 I: Um, were you still upset at the time of the injury or was it better at that time? You know, because you were already dancing like in November, regular shows? #00:23:33-1#

80 P: Oh yeh, I was upset when I got injured because I lost the opportunity to dance, this demi-solo, this part or to finish these shows and after I had, after this [REDACTED] I had ... I don't remember... maybe more [REDACTED] I think and [REDACTED], I lost the cast of [REDACTED]. So I was upset about this but I, I was thinking like, um, what help me in the spirit of injury, I would like to be good to, for April because I'm in the big premiere, is coming now, now, of an choreographer, of an classical. So, I think it is better now, to lose these things for to be good in April, so... #00:24:33-1#

81 I: Ok, um, so when you think about like, um, being new in the company, what was new or different compared to the junior company, the junior company before? Like what new things came up during this time? #00:24:52-6#

82 P: From the junior company, I was dance like so much the principal roles but here I'm corps of ballet, so this is completely new for me because never in my life I danced so much in group. And this is new for me, but this so good, it's not bad, I like it, it's very ... () for other people like the same talent than me, so we don't have this a lot in my junior company, we are 16 so. #00:25:23-0#

83 I: And like from the, um, like training or like how class, how rehearsal look like? Um, were there some differences? #00:25:33-5#

84 P: Difference for sure. But every difference, like I like it, you know. Try something new, something to inspire me. #00:25:46-8#

85 I: Was it more physically exhausting, um, for your body? #00:25:54-8#

86 P: Not exactly, I can say to you it's more easy I think, before I was rehearsing so much more. Here we have like so correct these things, we, we work until like 2, have a big break in the afternoon, come back at 6 and finish at 8:30, so we have this time so, so good here, it's not like so exhausting. #00:26:22-3#

87 I: Ok so you, you like the time, the timetable? [P: Yeh] This is fine for you? Ok, um, do think like the, the environment in dance, in the theatre could have affected the injury? That the injury happened? #00:26:39-3#

88 P: Not the fact of the theatre but the fact of my work in the theatre. #00:26:48-7#

89 I: Ok because you said you pushed yourself so hard? #00:26:51-1#

90 P: Yeh, they not like push me or like ... I push, push myself, I think. But I don't had anyone to, to tell me like, take it easy, or something like that, no, I need to learn to myself. I need, need to learn with the injury, to notice it. #00:27:11-8#

91 I: Um, ok, did the ballet masters, or how did they react when, or did you tell someone that you feel pain during the rehearsals? #00:27:20-6#

92 P: No, no. Just in the, just in the last moment that I couldn't dance anymore. #00:27:30-5#

93 I: Ok so when it was finally...? #00:27:31-3#

94 P: Yeh, they didn't know that I ... #00:27:35-8#

95 I: So, you were doing everything as before, 100%, and they also kind of expected it from you because they didn't know? #00:27:43-8#

96 P: Yes, yes. #00:27:47-7#

97 I: Um, why didn't you want to tell them? Was, is there a reason? #00:27:51-1#

98 P: I was afraid to lose the opportunities, this was ... the point is, it was my first job and yeh. And now I expect, I expect a lot like, the pain it would be gone if I just take it easy in the class or something like that. #00:28:14-9#

99 I: Ok good, um, then, um, just how was your social life like at that time? #00:28:29-7#

100 P: Good. I had like [REDACTED] friends here, I have a great group in the company. I have a good mood now, not mood like ... good connection, no not connection actually um ... I don't have

problems with anyone of the company, yeh I don't have problems with anyone in the company. I, I say hi to everyone, someone just hi, someone just like, compliment, or someone, hey, how are you? I don't have problems with anyone so it's completely ok. #00:29:11-1#

101 I: And, um, like, do you, um, how would you describe like the support by your family, by your friends at home, by the company colleagues, by the theatre itself? #00:29:26-9#

102 P: Before I had two more close friends in the company, two girls, [REDACTED] girls, so they are supporting me a lot. They are supporting me a lot. Every time giving me nice, or good advice, yeh they helped a lot. #00:29:44-5#

103 I: Um, so you wouldn't say, at the time of the injury there was something changed in this way, like in your social support by -? #00:29:54-4#

104 P: No, completely reversed, the people would more like helping me. Some others want like, they feel happy that I'm injured but I think that's normal in the ballet, ballet life, the theatre life because when you, when another dancer was injured, another ballet dancer have opportunity [I: Ok so Schadenfreude] Yeh, so that's that, this feeling is so bad but happens, I can't do nothing but to my real friends, so they give me so much support. #00:30:30-4#

105 I: Did you tell someone that you feel pain at that time? #00:30:36-7#

106 P: My friends like, this, this two friends, I think. #00:30:41-1#

107 I: At home? #00:30:44-3#

108 P: No, at the theatre, in class. #00:30:46-0#

109 I: So also your colleagues knew that there was something going on? #00:30:49-2#

110 P: Yeh but they don't believe me so seriously 'cause I'm still dancing so ... And also, me, I didn't believe that something so serious, you know? That's (). I couldn't support, I could support the, the pain. In the one I was, when I searched a doctor, I could support also I just, I was so worried about it because the pain is not going away, so like 15, 15 days with the pain, with the same pain and not going away. But I could, I could still dancing with this, it's not like, you know? I just went to the doctor because the pain would not go away. #00:31:47-7#

111 I: Ok good, um, how would you describe your overall health and well-being at that time? #00:31:55-7#

112 P: Sorry? #00:31:56-2#

113 I: Um, like how did you feel generally, like how was your sleep, how was your diet? #00:32:04-2#

114 P: Now? #00:32:03-8#

115 I: No, no, at the time of the injury? Before that? #00:32:05-6#

116 P: The time when I was with the crutches and the boot 30 days, with the crutches and boot, it was more worse because I couldn't like, do things for myself, like go to supermarket or something easy. But actually, everything ok, the sleep, I slept ok. #00:32:35-0#

117 I: Ok, also like before the injury happened? No changes? #00:32:39-4#

118 P: No, not much changes. #00:32:43-1#

119 I: No the sleep quality was worse or ...? #00:32:45-3#

120 P: No. Not exactly. #00:32:48-0#

121 I: Also, your diet was the same? #00:32:52-4#

122 P: No, some point of my injury, I, I give more attention to the diet because I, I could like to spend too much calories so I, I eat less. #00:33:05-6#

123 I: When you were already off training or before? #00:33:08-1#

124 P: Yeh when I was off. #00:33:09-4#

125 I: But when you were still dancing, you didn't change anything? #00:33:13-4#

126 P: Mhm (negative). #00:33:15-3#

127 I: Um, when you felt the pain, did you take any drugs against it or did you have any strategies to deal with the pain? #00:33:23-5#

128 P: Not whatsoever because I would like to feel it. I would like to feel it and to see how long is it. So, if I take medicine, I didn't control it to be worse. #00:33:40-6#

129 I: And, um, like your recovery times, like you said the lunch break and, was this like enough for you at that time or would you have needed more time to recover? #00:33:55-5#

130 P: () to recover to what? #00:33:59-1#

131 I: Um, no, like just from your day? Did you have, did you have enough recovery time? #00:34:05-6#

132 P: Yeh, I think so. #00:34:11-2#

133 I: Good, um, then something else you remember at that time that was different? #00:34:22-1#

134 P: Not exactly. #00:34:25-4#

135 I: Ok, then, have you had previous injuries in that area before? #00:34:32-3#

136 P: Never. #00:34:32-0#

137 I: No pain at all? #00:34:34-6#

138 P: Just in my back, in my lumbar. I had some protrusion in the L4/L5 so every time I need to, to always get stronger with the back, with the exercise. Because it would get worse, it's painful but not actually I need to stop to, I need to be off. #00:34:57-5#

139 I: Ok, never an injury where you had to take time off? #00:35:01-3#

140 P: Never, never in my life. #00:35:03-5#

141 I: That was really the first time ... Good, um, so now we get a bit more into psychological stuff. You just tell me if it's too much ok? [P: Mhm (affirmative)] So how would you describe yourself as a dancer? #00:35:22-6#

142 P: When I start to dance, I think. #00:35:30-7#

143 I: Um, or how do I say, um, like, what, what is your goal when you are dancing? Or what is your motivation when you are dancing? #00:35:42-1#

144 P: To getting better to myself, I would say is my goal. To superate my challenge, my own challenge, to ... Yeh I think is it. I'm not comparing with like, with anyone or ... just want to be better than me every day. In the beginning, no, in the school when I was children, for sure I have like people that are inspiring me, some big stars I remember but when I was children I always watching like the big ballerinas, the big ballet dancers. At some day, I, maybe I could, or maybe not, yeh that's it. #00:36:33-3#

145 I: Ok, and now, like, you would say you're motivated by getting better for yourself? #00:36:43-1#

146 P: Yeh. And to dance, when I, and to every day that is more difficult than before. To superate myself. It's gonna be the same. #00:37:00-3#

147 I: And how does that make you feel? Like, that you want to be better all the time and, 'cause it's some pressure on yourself? #00:37:09-4#

148 P: Yeh. But I feel ok, I feel it's ok with ... Sometimes when I needed a break, I wouldn't, I'm having fun like I'm, I went to party, I drink, I, I... I need stuff, fun, for like, how do you say um, to rest a bit of this life of ballet so... I can say, I every time like I'm some, something crazy, some ballet crazy no, eat ballet, no not like this. I had a life like to reset, rest with this stuff. #00:37:55-7#

149 I: Ok, so, you separate like ballet and -? #00:38:01-1#

150 P: Yeh, sure. #00:38:01-5#

151 I: Um, so do you think like how you are as a dancer, always pushing forward -? #00:38:11-3#

152 P: Sorry I didn't get it. #00:38:12-4#

153 I: Um, so how you are as a dancer, so like you want to better all the time, you're pushing forward [P: Mhm (affirmative)], do you think that could have influenced your injury? #00:38:26-2#

154 P: For sure, for sure. #00:38:30-8#

155 I: In which way? #00:38:33-5#

156 P: This way that I don't stop. I know how to separate but ... sometimes it's in my work, it's a lot, it's too much. So it can be... #00:38:55-2#

157 I: Ok and what do you mean with too much like, can you explain it? #00:39:03-1#

158 P: Too much, how to explain... Too much would be to, too much force when I don't need it in some exercise. Like some adagio in the center, put too much force in everything I do. Which is tough... so everything easy-going, you can do class I think easy-going, working and focus in the same time but when you are too much, you're always too much in everything that you do like the movements or the force that you put to do these things. #00:39:43-3#

159 I: Ok, and that's what you like did all the time? #00:39:47-6#

160 P: Yeh. Sometimes I was thinking like, more take it easy, but I think my natural, I have the habit to always like, like too much, like that's wrong, I think. I need to fix it, but this still needs time, I think. But always I think... #00:40:12-2#

161 I: But in which way do you want to change it? Or like fix it? #00:40:17-7#

162 P: The way like when I, when I do class, I feel like I need to, the barre just to warm up. I think that every class like an exam, exam in school you know. It, it can't be like this. I need some time easy-going, in some exercises I need to put more force, in other less. If you put so much, it can be like ugly or not like this, just like a militar or something like this you know. It's something that I'm working every day, like in my mind. #00:40:59-5#

163 I: Ok, so how much energy you put into everything? #00:41:04-5#

164 P: Yeh, yeh, every movement, every exercise is different for sure. #00:41:11-3#

165 I: Good, um, so you seem like, um, quite passionate, like with passion in dance, that you want to push forward. Do you have, or um, because one side is that you want to get better but on the other side, do you ever have like doubts about yourself or are you worried that, um, you can't do something, you know? That you might not - #00:41:46-6#

166 P: It's not make sense, no? #00:41:48-6#

167 I: Hm? #00:41:48-2#

168 P: It's not make sense, you know. Like this. How do I say, it's, it's so correct like, one side wants to push and other side is worried, so ... It's not make sense but ... #00:42:02-4#

169 I: You feel worried sometimes? #00:42:05-9#

170 P: For sure. But I couldn't stop that because I had some, um, I forgot the word, just a second, some ... excuse me... [P checks phone] some goal, goal yeh? And that's, that's my goal. I couldn't stop but I was worried because I can't stop. Not make sense but makes sense you know. #00:42:40-9#

171 I: Yeh, yeh, I understand. Um ... #00:42:43-2#

172 P: And to find this balance is so hard. To find this balance in your mind is really hard. It's really, really hard. In the morning, when you are young and have too much to show, have too much energy. Even if you see some ballet dancer with 26, 27 years old, it's another type of work. I think if you are like in the similar way, if this mature ballet dancers are all to the beginning, to completely different, to completely different. #00:43:22-6#

173 I: In which way different? #00:43:23-2#

174 P: Ha? #00:43:24-3#

175 I: In which way different? #00:43:26-7#

176 P: In every way like, the way you do the class, the way you dance, the way you treat your, your profession, your profession. #00:43:34-6#

177 I: So like the experience? #00:43:35-3#

178 P: Yeh, experience. But it's hard because we are immature. Everyone. But some people like, have more facility to, to find a correct way from the beginning and others not. #00:43:54-6#

179 I: How do you see yourself? #00:43:56-6#

180 P: No. Like breaking my head every time. Because every, I like, I left my mum with 13 years old so, the life taught me a lot, not my mum. I have the principles, for sure it's from my mum, I'm a good person because my mum. But I learned so much with the life, with life. Sometimes

it's not easy to learn with the life, it's better your mum teaching you. So, it's always for me, everything sometimes it's, I'm breaking my head, I'm trying, I, I'm be wrong to try to be correct, you know? I'm, or sometimes I'm, I'm on the wrong way but accidentally I'm correct. Yeh, it's so weird, it's like... You could understand me, no? #00:45:02-8#

181 I: Yeh, so [P points to water glass: Is that for me?] Yeh, of course. So, during this time, would you say you've been worried more than usually? Like - #00:45:16-5#

182 P: These 15 days? #00:45:17-8#

183 I: Like negative thoughts or something, you are questioning yourself? #00:45:23-4#

184 P: In these 15 days? [I: Yeh] In these 15 days that before the doctor, I was like so positive, like, I know this pain is gonna be gone, but after its discovery my mind changed. Like, this pain is never gone. #00:45:40-7#

185 I: So, like very extreme? #00:45:43-9#

186 P: Yeh. #00:45:45-9#

187 I: And, um, before you felt the pain? Like in November or something, have you been worried there or... about your performance? #00:45:59-1#

188 P: Oh some, sometimes when I got tips, sometimes what was still the pain, depends of the day, depends of mood. But when I feel the pain, I always try to be positive and not thinking. #00:46:18-1#

189 I: Um, did you ever experience, um, like performance anxiety, something that you're like very nervous before a performance or like before an exam? You know what I mean? #00:46:36-2#

190 P: Yeh, I, I already feel it. But not much. #00:46:41-8#

191 I: Ok so it's not, um, so much that you cannot dance or something? #00:46:50-9#

192 P: No, I don't understand, if I feel like nervous before I go on stage? [I: Yeh] Not too much. Because before, when I school, I had some experience like some competitions, Prix de Lausanne, this stuff, I was so much nervous that after these I didn't feel nothing to go to the stage anymore, I don't know. Noth-, nothing, I can't say nothing but not too nervous like, like more you know. This feeling like disturbing you, no just, I can feel like I, I, I'm not saying that I'm not afraid, but I can say like I, I desire to go on the stage. It's different, it changed after this. Because on the first competition that I had in Argentina, I, I had this, um, zoster. I don't know if you know it. It's herpes, herpes? Herpes, it's um, this balls like allergic but it's not allergic... #00:48:06-2#

193 I: Like a skin reaction? #00:48:08-9#

194 P: Yes, this zoster [P checks phone] Yeh, yes, it's the name in English also herpes zoster. It's a virus. [P reads definition on phone] Varicella zoster human usually referred to as the varicella-zoster virus is one of nine () viruses known to affect humans. It's the case of about the nervous system. Yeh, it's some virus that can be, because of the ... I don't think I read the correct thing but it's, it's some virus is liberated that everyone has in the body but is just like, can be the skin reaction, it's such debate of the system, the nervous system [I: Ah ok]. So, I was so much nervous, and I was this skin reaction that we call in [REDACTED] herpes zoster, and after this like, I don't feel nothing, like nervous yeh. I think my brain blocked this time because it was so painful in this region of the chest, the back, it's like one arkle (? arches/ankle) and it was so painful so I think my brain blocked it, I don't feel like so much nervous before just I feel the sensation, desire to be on the stage, like this. #00:49:52-4#

195 I: Ok, so like during this winter, November, nothing like this? #00:49:59-4#

196 P: No. #00:50:00-5#

197 I: Ok, good. Um, how would you describe your mood state during this time? #00:50:09-4#

198 P: Mood state? #00:50:11-5#

199 I: Um, like, emotional, you know, happy, do you were like sad, you know like this way? Before you felt the pain? #00:50:23-2#

200 P: I don't understand, sorry. #00:50:25-0#

201 I: Um, what kind of emotions did you feel at that time? #00:50:35-7#

202 P: Before I feel the pain? #00:50:36-7#

203 I: Yeh. #00:50:38-8#

204 P: Every emotion I think, happy, sad, surprised, expected... #00:50:49-2#

205 I: So, nothing unusual? #00:50:51-9#

206 P: No, is unusual because I already told that's all different to me, so every day was different to me, every day was new experiences, not new feelings but different feelings, different emotions like... You know, some days I, I was feeling like, oh yeh I'm, I'm doing good, and some days, no I'm sad, I'm thinking I'm not doing so good like this. #00:51:17-9#

207 I: So, like a lot of changes just? #00:51:21-3#

208 P: Yeh, mhm (affirmative). I think to everyone that work in the professional company, it's like this because we never know what's looking forward for us. #00:51:32-9#

209 I: Can you explain it? #00:51:34-5#

210 P: You never know what's gonna happen in the one professional company, one day you can dance this role and another day can be another person come and, um, and dance this role to you or ... You never know when director runs so, every day is like surprise for, to everyone. I think it's also for the principal dancers, it's not like just to the corps of ballet. I think the ballet dancers is, is ... you can like have some program in your career but usual it's every day one surprise to us. #00:52:13-3#

211 I: And how does this make you feel like always these kinds of surprises? #00:52:18-1#

212 P: I love it, I love it. #00:52:18-5#

213 I: You love it? Ok. #00:52:19-8#

214 P: Yeh because it's not like you work some, um, adov-, adovocacy, ... Lawyer, lawyer, sorry. You know that you can, you need to go your office in which you have one case to defend or to do something, it's every day like the same thing, you know. You go to the office, you sit down, like teacher from the school, they, they know that they need to go to school teaching the childs. It's every day, every single day is the same, you know. For us not. Every single day is new, is different, it's worse, it's better, it's ... part-, particularly, um, part- sorry just a second [P checks phone]. Particularly, particularly for me, I like it. Some people don't like it, like feel uncomfortable but I like it. Yeh... #00:53:38-3#

215 I: Um, but I mean, you can't really do something about these surprises, right? Um ... #00:53:52-1#

216 P: We can't control, that's it. #00:53:53-9#

217 I: Ok, but how does it make you feel that you can't control it? Is that something for you or ...? #00:54:02-7#

218 P: In another way, we can control but not the situation but how we, how we can like, um, how we can do it with the situation, how we can ... #00:54:28-9#

219 I: How you deal with it? #00:54:30-3#

220 P: Yeh. #00:54:33-9#

221 I: And you can do this for yourself? #00:54:35-5#

222 P: For sure. Just, just for yourself, anyone can do this for yourself. Is different case when some people like, some ballet masters like another person, or some director like another person more. Everyone have every-, everywhere have these type of things but ... #00:55:00-1#

223 I: For you it's not a problem or ...? #00:55:03-3#

224 P: For me it's always normal, I think. For, it's a problem but I, we can do nothing about it but we can just like protect ourselves or find some way to, to live good with it. And some people can't do it and that's the point. Some people don't like or given up the cover (?). #00:55:34-2#

225 I: Ok, um, do you have something else to add to this? #00:55:40-4#

226 P: No. #00:55:42-3#

227 I: Um, then something different. Have you been practicing at the time like some strategies, methods that help you like in stressful situations? #00:56:00-7#

228 P: Not exactly, not exactly. #00:56:02-1#

229 I: Like, I don't know, meditation, yoga, mind techniques? #00:56:09-0#

230 P: No. #00:56:10-3#

231 I: Ok, good. Um, then please just think back about the time, like the time before you felt the pain and then when the pain progressed to the injury, is there something else that you say could have influenced it? That you felt stressed? #00:56:36-7#

232 P: No. I think I told everything. Yeh, I think. #00:56:50-4#

233 I: Good, um, then, um, then just one last thing. Um, so we are done like with these questions now if you don't have anything to add anymore? #00:57:03-6#

234 P: No. #00:57:04-7#

235 I: Ok, then could you tell me, um, just like roughly, in a week, how many hours of class do you have? If you count it? #00:57:20-6#

236 P: You have a paper? I try to, it's completely in my mind, but so hard... #00:57:45-7#

237 I: Ok, where can you write it down, just write it on here, down there. #00:57:49-7#

238 P: (break until 58:33-8) Just in between this, 7 hours and a half and 8 hours 45. It's in between because sometimes we have six class, no... #00:58:46-1#

239 I: So, let's say just- #00:58:46-9#

240 P: No, no, it's not correct, it's not 8 hours, sorry, sorry. It's in between like 6, 6:15 and 7:30. Yes, in between like this. #00:58:59-5#

241 I: Ok so 6 between 8, just roughly, really roughly. Um... #00:59:03-1#

242 P: Yeh, 6 between 8. #00:59:05-3#

243 I: Ok, and rehearsal? Just ... #00:59:08-7#

244 P: Oh my gosh... #00:59:09-6#

245 I: I know. #00:59:11-6#

246 P: For, like for rehearsals, sometimes, for like, I don't know () ... 24 hours? 24, between 24 and 25 hours a week rehearsing. #00:59:35-6#

247 I: A week ok? #00:59:36-7#

248 P: Let's put, let's put 20 on to like 25 because some days we don't have like whole day. Yes, it's 20 hours, it's in between 20, for sure. #00:59:49-2#

249 I: Ok, and like, a normal week, how many performances would you have in the evening? #00:59:55-6#

250 P: Some, some weeks we don't have performance. Some weeks we would have like 4, some weeks like 2, some weeks one, I don't know, it depends. But to month, actual month is in between 6 until 10 performances for month. 5 to 10, like this. This month we just have 4. #01:00:23-9#

251 I: Ok, good. Ok something else to add? #01:00:28-7#

252 P: Mhm (negative). #01:00:29-2#

253 I: Then I would stop the interview at this point. #01:00:35-5#

Declaration of Authorship

I confirm that this Master's thesis is my own work and I have documented all sources and material used.

This thesis was not previously presented to another examination board and has not been published.

Place and date

Signature