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Thriving, Striving, or Just Surviving? TD Learning Conditions, Motivational Processes and Well-Being Among Norwegian Elite Performers in Music, Ballet, and Sport

Heidi M. Haraldsen , Sanna M. Nordin-Bates , Frank Eirik Abrahamsen, and Hallgeir Halvari

ABSTRACT

This study explored the motivational experiences of nine successful elite performers in ballet, music, and swimming at Norwegian talent development (TD) schools. Semistructured interviews were conducted. Thematic analysis revealed that the performers navigated within and between several contextual layers, characterized by egalitarian values, high-performance deliberate practice, and controlling conditions. These TD learning conditions provided multifaceted motivational experiences that affected performers' motivational regulation, ranging from predominantly self-determined, via multifaceted, to predominantly controlled. The types of motivational regulation mattered, as performers regulated by self-determined motivation engaged in their performance development in a more joyful, robust, and healthy way (i.e., self-realization, flow, self-esteem, and vitality), showing less dependence on their given TD learning conditions. In contrast, performers regulated by controlled motivation reported higher vulnerability, and in turn, more ill-being (i.e., low self-esteem, perfectionism, obsessiveness, anxiety, negative affect, and exhaustion).

KEYWORDS

educational psychology; motivation; motivational climate; performance psychology; talent development

Attaining excellence in the arts and sports is hard. One has to endure years of deliberate practice and navigate through a demanding talent development (TD) process (Ericsson, 2008; Pecun, Collins, & MacNamara, 2018; Walker, Nordin-Bates, & Redding, 2010). TD is recognized as situated, dynamic, and multidimensional, and researchers have focused on how motivation operates as a salient psychological factor (Jordet, 2016; MacNamara, Button, & Collins, 2010; Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). In the arts, as in sports, the strength and quality of motivation in individuals are believed to interact with cues from the learning environment, thus influencing the talent development process (MacNamara, Holmes, & Collins, 2006; Quested & Duda, 2011).

Successful elite athletes, dancers, and musicians are characterized by many of the same motivational characteristics (e.g., intrinsic motivation, high standards, flow, and adaptive coping strategies) compared with less successful performers (Jordet, 2016; MacNamara et al., 2010, 2006; Quested & Duda, 2010). In contrast, motivational conditions and learning environments may vary across contexts (e.g., cultures, domains, and traditions) and TD stages (e.g., sampling, specialization, and investment years; Côté, Baker, & Abernethy, 2007), likely influencing young performers' development and functioning in different ways (Quested & Duda, 2010;

Subotnik, Olszewski-Kubilius, & Worrell, 2011; Vansteenkiste & Ryan, 2013). Thus, the present study aimed to investigate the relations between conditions (where you are), motivational characteristics (who you are), and implications (thriving, striving, and/or surviving), by exploring established elite performers' experiences of diverse TD schools.

The motivational process

Motivation is an ongoing process that energizes, directs, and maintains behavior (Deci & Ryan, 2000; Ryan & Deci, 2017). In TD settings, optimal motivation may be crucial for learning and development, and for healthy participation (Fransen, Boen, Vansteenkiste, Mertens, & Vande Broek, 2018; Lacaille, Koestner, & Gaudreau, 2007; Mahoney, Ntoumanis, Mallett, & Gucciardi, 2014). A review of education for the gifted (Subotnik et al., 2011) highlighted how gifted students are motivated by diverse motivational factors, and asked for more research on the interrelations of motivational aspects in TD. However, motivational theories are often studied separately and seldom connected synergistically. Therefore, in this exploratory study, an inductive and open approach to theory was used. A range of theories were used to construct an extensive interview guide (achievement goal theory, passion

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theory, self-determination theory, flow, and perfectionism), and each theory was then considered during the analysis. Eventually, self-determination theory (SDT; Ryan & Deci, 2017), coupled with aspects of flow (Nakamura & Csikszentmihalyi, 2009) and perfectionism (Hill, 2016), emerged as the most relevant theories. For the sake of brevity, only these selected theories are outlined below.

SDT could be a widely applicable motivational framework for TD contexts, as it investigates the determinants of optimal human functioning and personal growth (Deci & Ryan, 2000; Vansteenkiste & Ryan, 2013). SDT differentiates among three forms of motivation (intrinsic, extrinsic, and amotivation). When intrinsically motivated, people are most self-determined or autonomous, and endorse their activity because of enjoyment or interest. Extrinsic motivation consists of four types of regulation differentiated by the degree of self-determination, which describe two types of autonomous regulation and two types of controlled regulation (Deci & Ryan, 2000). When driven by autonomous regulation, one endorses an activity with authenticity, either because it is interesting and/or meaningful (integrated regulation), or personally important (identified regulation). In contrast, controlled motivation is less self-determined, emanates from internal or external control, and is driven by obligation, guilt, or shame (introjected regulation), and/or by coercive demands, pressure, and reward (external regulation; Bartholomew et al., 2018). Amotivation is associated with nonregulation, and characterized by feelings of incompetence and lack of meaning (Deci & Ryan, 2000). An individual's motivational profile might be multidimensional, a blend of the different types of regulation. For example, elite athletes have been found to possess high levels of autonomous and controlled motivation (Gustafsson, Carlin, Podlog, Stenling, & Lindwall, 2018).

Research in achievement settings has generally supported the tenets of SDT, and showed that autonomous regulation is associated with adaptive functioning and positive outcomes (Evans & Bonneville-Roussy, 2016; Ivarsson et al., 2015; Quedsted & Duda, 2011). For instance, satisfaction of the need for competence and autonomy is associated with enhanced *flow* (Schüler, Sheldon, & Fröhlich, 2010). Flow is a state of intrinsic motivation in which a person is fully absorbed for the sake of the activity itself, and is positively related to peak performance (Hefferon & Ollis, 2006; Nakamura & Csikszentmihalyi, 2009; Thomson & Jaque, 2016).

Conversely, controlled motivation is associated with maladaptive functioning and ill-being (e.g., higher levels of perfectionism, lack of adaptive coping strategies, and in turn, increased stress, burnout, and performance anxiety; Gustafsson et al., 2018; Haerens, Vansteenkiste, Aelterman, & Van den Berghe, 2016; Mouratidis & Michou, 2011). The motivational signature of perfectionism is characterized by striving for flawlessness, accompanied by harsh self-evaluation and oversensitivity to mistakes (Hill, 2016). Perfectionism is paradoxical, found to exert a strong drive (i.e. dedication and persistence), and to facilitate debilitating behavior patterns (i.e., obsessiveness, rigidity, and avoidance strategies; Hall & Hill, 2012; Hill, 2016). Elite performers are more likely to possess perfectionistic tendencies (Dunn, Dunn, & McDonald, 2012), and performers with controlled motivation typically display higher levels of debilitating perfectionistic behavior patterns (Barcza-Renner, Eklund, Morin, & Habeeb, 2016; Stoeber, Damian, & Madigan, 2018).

Motivational processes in TD settings manifested in the arts and sports

Motivational conditions (e.g., teaching or coaching style) are important for motivational quality (e.g., autonomous/intrinsic or controlled/extrinsic; Ryan & Deci, 2017). Known to facilitate autonomous motivation, in autonomy-supportive conditions, typically the teachers and coaches relate to the performers' perspective, encourage self-initiative and exploration, offer relevant choices, and provide constructive and informative feedback (Reeve, 2009; Ryan & Deci, 2017). In contrast, in controlling conditions, teachers and coaches tend to pressure performers, enforcing or manipulating a preconceived way of thinking, feeling, or behaving (Bartholomew et al., 2018; Reeve, 2009). Research in the arts and sports indicates that autonomy-supportive conditions nurture autonomous motivation, optimal functioning, and well-being, and therefore, are considered supportive of adaptive TD processes (Evans & Bonneville-Roussy, 2016; Fransen et al., 2018; Haerens, Aelterman, Vansteenkiste, Soenens, & Van Petegem, 2015; Hancox, 2014). Paradoxically, and despite the research evidence, controlling teaching and coaching styles appear to be common (Johnson, 2011; Pecun, Collins, & MacNamara, 2016; Reeve, 2009).

Performance domains are manifested in diverse TD cultures that set pedagogical and structural conditions

of deliberate practice (Grecic & Collins, 2013; Johnson, 2011; Persson, 2000). The present study is situated in Norway, in many ways a typical small Nordic country with a comprehensive public welfare system. Based on social–democratic, nonhierarchical, and egalitarian values, the Nordic cultures are founded on autonomy (Arnesen & Lundahl, 2006; Ronglan, 2015). Embedded in the egalitarian model, elite sports within the Nordic countries are developed bottom-up within voluntary-based and democratic sports organizations promoting broad participation, sports sampling, late specialization, and healthy participation (Côté et al., 2007; Ronglan, 2015). The Nordic sports model has emphasized the value of informal practice based on play, combined with a holistic approach (focusing on balancing physical skills, technique, mental skills, and attitudes in an individualized learning process; Côté et al., 2007; Ronglan, 2015). Such practices are in line with the tenets of SDT (e.g., autonomy-supportive; Ryan & Deci, 2017), and are claimed to be evidence-based and sound (Grecic & Collins, 2013; Martindale, Collins, & Daubney, 2005).

At the same time, TD schools in classical music and ballet reflect an experience-based performance tradition and are held at state-governed specialized universities (e.g., conservatoires) developed over centuries (Burwell, 2013; Nielsen, 2006). TD schools are considered to involve early specialization, formal top-down delivered learning methods, and asymmetric power relations (Nordin-Bates, 2014; Pecen et al., 2016; Stabell, 2018). For the student, the relationship with his or her teacher is important, because the teacher is seen as a gatekeeper (Burwell, 2013; Pecen et al., 2016). In a study of dance conservatoires, 78.3% of students reported their teacher was the most important person in their career (van Rossum, 2001). Moreover, the learning methods (based on observation and imitation, followed by teacher feedback and correction) may be seen as relatively passive and nonautonomous (Johnston, 2006; Lakes, 2005; Morris, 2003). Especially in ballet, there might be an extreme objectification of the learner, where gifted young dancers, fixated on extreme body-image demands, ought to be “hardened” and “put to the test” (Gray & Kunkel, 2001; Nordin-Bates, 2014). Music students are challenged in other ways, as music typically demands solo practice for several hours each day. Thus, self-regulation and self-determined motivation are important attributes, but as research has pointed out, these skills are developed far too late in music students (Hatfield, 2016). Thus, an increased focus on autonomous motivation could be beneficial, enhancing

music development (Bonneville-Roussy & Bouffard, 2015; Hatfield, Halvari, & Lemyre, 2016).

The present study

Based on the issues outlined thus far, the present study aimed to explore and identify TD learning conditions, and how they relate to performers’ motivational processes and well-being. Few studies have examined motivational processes in different performance contexts, and the lack of research seems especially pronounced within performing arts domains. To support effective change, in-depth investigations that explore and identify how multifaceted conditions unfold, and are perceived and responded to by performers, might be useful. In addition, the vast majority of motivation research is quantitative, lacking the possibility of exploring individuality and complexity. Thus, this study was designed with qualitative methods guided by the following research question: In what ways did elite performers in classical music, ballet, and sports experience and characterize their TD learning conditions, and how did these experiences relate to the performers’ motivational processes and well-being?

Method

Contextualization, participants, and ethical considerations

The study focused on specialized TD schools at the precollege level facilitating performance development during the investment years (Côté et al., 2007). TD schools within the arts are run by specialized universities, while TD schools in sports are operated by sports federations in collaboration with the Norwegian Olympic Center and specialized private high schools for elite sports. The Norwegian TD system aligns with Bloom’s TD model phases (i.e., romance, precision, and integration), and the targeted TD schools and programs were within stage three (integration), with entrance regulated by competitive auditions, offering acceleration and enrichment (Subotnik et al., 2011).

We purposefully selected nine successful participants with experiences of TD schools. To get rich data, we targeted successful performers who had “made it,” and were in safe positions to make long-term processed meta-reflections. This perspective is in contrast to that of young TD performers, who may lack deep reflection on long-term impact. Participants were recruited from the Oslo Symphonic Orchestra (participants 1m, 2m,

Table 1. Descriptions of participants.

Participant	1m	2m	3m	4d	5d	6d	7s	8s	9s
Domain	Music	Music	Music	Dance	Dance	Dance	Sport	Sport	Sport
Gender	Female	Female	Male	Male	Female	Male	Female	Male	Female
Age	41	27	27	31	35	25	32	35	33
Entrance age	9	2	5	6	7	10	6	5	4
Hours/week	25	38	40	43	37	40	28	28	30
Years in profession	13	3	2	10	8	6	10	6	10

and 3m), the Norwegian National Ballet (participants 4d, 5d, and 6d), and among former national senior swimmers (participants 7s, 8s, and 9s).¹ Inclusion criteria were (a) experience of a prestigious elite Norwegian TD program at the highest level and (b) an established professional career (musicians and dancers) or a top five position at an international championship (swimmers). All participants had started relatively young and had long experience, as documented in Table 1.

We contacted participants through email and by phone, and they received written and oral information about the study before voluntarily consenting to participate. The Norwegian Center for Research Data gave approval before we commenced.

Data generation and rigor

Semistructured interviews

The interview guide included four overarching dimensions developed to address (a) motivational characteristics (motivational regulation, dedication, aspirations, and view on success and failure); (b) learning conditions (relationships, mastery vs. performance focus, learning strategies, autonomy support vs. controlling style); (c) person–environment interaction (match or mismatch of motivational characteristics and TD learning conditions); and (d) implications for motivational processes and well-being. To tap more freely into the participants' lived experiences, we structured the interviews by first asking open-ended questions within each general dimension: (a) "Why did you practice your activity, and why did you choose to invest so much in your activity?" (b) "What were the learning conditions in your activity like?" (c) "In what ways did you experience that the received help and support fitted your needs and aspirations?" and (d) "What role do you think the learning conditions in the TD program played in your learning and development, and for your well-being in general?" Additionally, we asked follow-up questions, as well as spontaneous questions within each dimension, in an attempt to dig deeper into the core concepts and reflections that appeared during the

interviews. The first author conducted all the semi-structured interviews face-to-face, which were audio-recorded (range 39 min – 108 min) and transcribed. NVivo 11 was used in the data analysis to facilitate the thematic analysis.

Data analysis

We utilized thematic analysis, informed by Braun and Clarke's (2006) six guidelines for data driven analysis. The first step consisted of inductive open coding of meaning units. Each transcript was coded line-by-line in initial codes, staying close to the data. In the second step, we reread the initial codes, and grouped them into categories by using a saturation method of creating categories until all units were properly fitted in a category. The third step consisted of rereading the categories, seeking overall themes that, in turn, we reviewed, reflected upon, and renamed. In the fourth step, we used a comparative approach, and compared and analyzed all of the data material (e.g., thematic structure, quotes, field notes, reflective logs, debriefing notes) across different contextual layers (see Table 2). In this process, personal narratives of each performer's TD story were created (see Table 3). In the fifth step, we analyzed the material deductively in relation to the research question and relevant motivational theory. Multiple motivational frameworks (achievement goal theory, passion theory, SDT, flow, and perfectionism) were considered. In the sixth step, we organized the data into a meaningful structure, to present the results.

Rigor and quality

To enhance reflectivity and critical reflection, we used several strategies influenced by recent recommendations (Finlay, 2002; Hammersley, 2007; Smith & McGannon, 2017). First, to increase honest and authentic accounts when generating data, the interviewer tried to empower the other, and create safe settings (Sparkes & Smith, 2014). Second, active use of paraphrasing and member reflections invited participants to reflect and comment on the interviews.

Table 2. Thematic structure.

	Contextual Layer	Theme	Category
TD learning conditions	National layer	The Norwegian way	Exclusive & student centered Teacher/coach support Peer support
	Elite talent development layer	High-performance deliberate practice	Talent focus Structure & system Top teachers/coaches in the field High expectations and demands Favoring the “best” Early socialization & professionalization
		Controlled learning conditions	Authoritarian Rigid
	Art specific layer	Distinct traditions and belief systems within the arts	Tacit knowledge culture Artistic dimensions
Performers’ motivational processes	Individual layer	Motivational characteristics from childhood (entrance to TD)	Intrinsic (inner love & drive, interest) Introjected (family expectation, internal pressure, conditional approval) External (status, winning, external pressure)
		Motivational experiences at TD years	Identified as gifted Mastery and competence development (learn, develop, improve, reach goals, win**) Flourishing being part of high quality practice Flow experiences (in training, bodily, emotionally*) Be seen and get approval (from teacher, peers and audience*) Challenges (failure, stagnation, lack of flow, lack of motivation, lack of status, injuries, lack of coping strategies, body image pressure)
	Motivational implications	Disciplined and conscientious Ability to immerse oneself, prioritize Autonomous behavior regulations (intrinsic, integrated, identified) Controlled behavior regulations (extrinsic, introjected) Competition instinct and goal driven** Perfectionistic and highly self-critical* Ambivalent perceived competence Underestimating own competence*	
Well-/Ill-being		Well-/ill-being experiences	Thriving (self-realization, social contentment, high self-esteem, positive affect, vitality, flow) Striving (performance anxiety, perfectionism, lowered self-esteem, negative affect) Surviving (obsessiveness, eating disorder, exhaustion)

*only artists; ** only athletes.

Third, a log of the interview setting (e.g., communication flow, power distribution, emotional moods, and the unsaid) functioned as field notes. Finally, we utilized continuous peer debriefing sessions in the research team in an attempt to enhance insight, ethical responsibility, and nuanced perspectives in the data analysis (Smith & McGannon, 2017). As the authors had extensive applied experience in the arts (the first and second authors) and sports (the third author), this tool worked well in engaging the researchers to nuance comparative and applied perspectives, and to bridge theory and practice. We acknowledge that nonlinear ongoing interactions among theory, data, and methodological strategies shaped the findings, and that other interpretations are possible.

Results

We organized the presentation of results in line with the thematic structure that emerged in the analytic process presented in Table 2, starting outside in, from generic to

individual layers. For the sake of brevity, the more complex individual perspectives are documented in Table 3, and only the general patterns are reported in the main text. To enhance authenticity in the text, direct quotes are used in each section, marked by the participant’s number and domain (*m* = music; *d* = dance; *s* = sports).

TD learning conditions

National layer: The Norwegian way

The performers reported that they perceived the Norwegian TD style to be distinct and unique:

I have been quite a lot in the music context abroad, where I have felt the culture as very different. Where there is a lot of ego and competition, and you have to be very tough to be able to survive. In order not to be held down ... I think it is almost too good in Norway ... it is so safe and nice. (2m)

All performers had been placed in age groups with fewer than 10 students. They described being part of small, exclusive, student-centered, and unique groups.

Table 3. Individual motivation TD pathways of participants.

	Motivation Childhood	Motivational Experiences in TD Practices	Motivational Regulations TD Years →	Well-/Ill-Being Implications
3m music; male	Inner love & drive; <i>"I have always liked to rehearse ... I liked the sound, and I really liked the music made for violins."</i>	Mixed experiences. Mostly mastery, enjoyment and positive development in early years, but experienced some pressure and expectation due to early participation in high-performance environment. Experienced some striving and challenges at TD school; moved away from home, conflicting relationship with teacher, frustration with authoritarian system and lack of use of creativity.	Predominantly autonomous; intrinsic, integrated- and identified; <i>"I like to play the violin and seek that enjoyment to stay motivated"; "[when failing] I tried to look at it in perspective and learn from it and bring on something from the experience, and not just be upset"; "I usually never give up, I work as long as it takes to reach the goals."</i>	Performance anxiety; <i>[at TD school] "I didn't feel free on the stage. It made me unsecure and stiff";</i> Performance level; <i>[at TD school] "I believe that it is important to thrive and enjoy yourself. Or else it would be difficult to express through the music";</i> Self-realization; <i>"I express myself and my deep emotions through music, express the personality through the playing."</i>
9s sport; female	Inner love & drive; <i>"I have always enjoyed water. To play and swim, and I think it was the speed and the bodily sensation in the water that attracted me. I was just fond of being in water."</i>	Mostly mastery, enjoyment and positive development all the way, especially in TD school years; a positive circle of development with mastery, relatedness (peers & coaches, autonomy; <i>"I felt I had control, that I sat in the driver's seat ... I believe I had so high self-esteem then, that it was easy to make a decision."</i>	Predominantly autonomous; intrinsic, integrated- and identified; <i>"It's about doing what it takes even if nobody watches ... you can't lean back and believe that the success will come by itself."</i>	High motivation, self-esteem, positive affect and vitality; <i>"It was nice gaining those results. It was important as a storage of self-esteem ... it equipped me with a motivation that grew larger and larger"; "I think I actually never was afraid or stressed toward failing"; "you have to enjoy yourself, be happy and have fun in order to succeed."</i>
1m music; female	Extrinsic (pressured, satisfy expectations from family), <i>"I grew up with classical music ... it was the only music that counted, everything else was garbage ... I learned to like it."</i> But also intrinsic; <i>"I liked the music and enjoyed music."</i>	Mixed experiences. Struggled with expectations and pressure from family and teachers, seeking external approval, contingent perceived competence. High satisfaction of the need for relatedness all the way. Mastery and high performance level nurtured the need for competence, even though it was external and contingent.	Multidimensional; intrinsic, identified- and introjected <i>"I was never satisfied, more a doubter; "I find it very hard to maintain motivation and to prioritize the cello these days"; "The interplay together in an orchestra, I found it fantastic ... it was a place that I really belonged ... it was so fun."</i>	Performance anxiety; <i>"I have always been afraid, because I know how I react when I fail. That it is, it's terrible";</i> Lowered self-esteem; <i>"I was very shy, anonymous and reserved. I didn't like the attention or to be out in front ... I found no joy in just being myself."</i> Well-being; <i>"I experienced joy through the music, and deep feelings ... and to share these experiences with others, being part of a thriving environment, make close friends."</i>
2m music; female	Extrinsic (status, satisfy expectations from parents); <i>"I liked to be good at something and to demonstrate competence, like 'showing off'; "In the beginning, it was easy. There were no expectations, I was good and it was fun."</i>	Mixed experiences. Mostly challenges and striving in early years before Norwegian TD school. Expectations from parents, educated partly abroad with controlling and authoritarian teachers; <i>"it was so hard, I was crying after every lesson, each week, it was so terrible."</i> At TD school things turned around; experienced it very egalitarian and student-centered, a fantastic and nurturing teacher, supporting peers.	Multidimensional; identified- and introjected; <i>"I started developing doubts if I would make it or if it was worthwhile"; "a motivation has been to be able to express myself through music."</i>	Lowered self-esteem; <i>"The feedback I got was that I didn't express myself enough, that I lacked a personality, a character in my playing, that I didn't seem to know who I was and was too afraid."</i> Well-being; <i>the wounds I got, it was as I was patching up all the wounds ... I felt I was becoming a complete person again."</i>
4d dance; male	Inner love & drive; <i>"When I was a child I found everything enjoyable and fun ... the first stage experience was magical, it was a groundbreaking experience."</i>	Mixed experiences. Mastery, intrinsic motivation, lots of playing and creativity. TD years more challenging due to expectations and pressure both from outside (family, friends, teachers) and within (perfectionism). Very frustrated toward the rigid, tacit and authoritarian system. Satisfaction of relatedness all the way. Artistic processes and being able to express enhanced flow.	Multidimensional; intrinsic, identified- & introjected- regulations; <i>"I have always strived toward perfection, even in childhood. I strive for it each day"; The effort I had to do to make progress each day. That is something I still work on. Not to just maintain, but to actually develop each day"; "I love to express, the theater as an institution drives me."</i>	Perfectionism; <i>"I did experience mastery as well, but mostly I experienced failure ...</i> Performance anxiety; <i>"I remember being very afraid and nervous, even in rehearsal situations."</i> Physical anxiety; <i>"I was afraid to be exhausted, afraid of the physical pain that follows the hard work. It is so painful."</i> Self-realization/flow; <i>"I find the artistic processes thrilling and exiting. Moreover, I may be able to lose myself within the process."</i>

(Continued)

Table 3. (Continued).

	Motivation Childhood	Motivational Experiences in TD Practices	Motivational Regulations TD Years →	Well-/Ill-Being Implications
6d dance; male	Extrinsic (status, expectations from parent & teachers); <i>"I was told to try classical ballet. Therefore, I did. I started at the national ballet school, and I just was stuck there; one thing led to another."</i>	Mixed experiences. Frustration with rigid and authoritarian system, disliked and frustrated with the discrimination of "bad students." Good peer relations within and outside TD school; <i>"a lot of frustration and a lot of mastery ... either in a good or bad circle."</i> Competence contingently satisfied/frustrated.	Multidimensional; intrinsic, identified- & introjected regulations; <i>"I liked the challenges ... to experience a curve of development"; "[success] is to be able to do as told/taught, and to be approved by leaders"; "I take it very personal when I fail."</i>	Increased self-esteem; <i>"to master the difficult technique made me feel proud and good, also in the daily-life."</i> Performance anxiety; <i>"it has been a lot of anxiety, really bad ... both at training and performances. A lot of nightmares, it has been a lot of shit going on."</i> Negative affect; <i>"it brought me down a lot does times I was in a bad circle of development, it was and are really hard."</i>
7s sport; female	Inner love & drive, status, winning; <i>"I found it extremely enjoyable ... I loved being in the water"; "I found it very cool to compete ... it was a deeply wish to be the best."</i>	Mixed experiences. Mastery, intrinsic motivation, lots of playing early. TD years; frustration; conflict with coach and sickness, in turn stagnation and demotivation. <i>"It was his [the coach] way of doing things. To me who knew that I needed other approaches, it became easier to not attend."</i>	Multidimensional; intrinsic, identified- & introjected regulations; <i>"I thought it was extremely fun, it was a good drive"; "I liked to win from an early age ... and I mastered early ... It gave me motivation that lasted all the way."</i>	Performance anxiety, <i>"When you got more experience with bad performance, it occupied a lot of your time and focus. Maybe it made you analyze stuff, and made you afraid to not perform at the expected level."</i> Negative affect; <i>"It was such a feeling of failure ... it made you frustrated, at practice and in competition."</i> Exhaustion, sickness; <i>"the conflict with the coach made me exhausted ... I was extensively injured and sick."</i>
5d dance; female	Extrinsic (status, be approved by family); <i>"I think everyone expected that I loved dancing ... but I got more motivated in trying to not disappoint anyone, and I wanted to fulfill being that typically 'ballerina'."</i>	Obsessiveness and high expectations and pressure from family (external) and within (perfectionism). Never feeling satisfied (self-critical). Lack of self-determined motivation and enjoyment. Relatedness was good.	Predominantly controlled; extrinsic and introjected; <i>"It was more that I was satisfied if I didn't mess it all up, that I didn't make mistakes visible to the audience"; "I wasn't allowed to quit by my parents because I was talented"; "All the time and effort required to be a soloist, for me, it isn't worth the effort anymore."</i>	Low self-esteem; <i>"Well, I often had a sense of not being good enough."</i> Performance anxiety; <i>"to handle when the anxiousness really kicked in, that was my biggest challenge."</i> Eating disorder; <i>"I became very conscious of body weight ... Always a bad conscience when I ate ... I was unusually skinny, but I remember feeling very big."</i> Perfectionism; <i>"I found it uncomfortable to be on stage ... I didn't want anybody to see me ... I felt that there was so much that was not good enough."</i>
8s sport; male	Extrinsic (status, winning); <i>"To know that I was the best, that there were no one that outperformed me. I found that very enjoyable ... I wanted that victory ritual ... I was very competitive of nature."</i>	Mixed: Mastery, success, mastery focus and enjoyment in local club. In TD years, pressure and frustration; moved away from home, superficial relationship with authoritarian coach, obsessiveness, contingent perceived competence (stagnation as senior).	Predominantly controlled; extrinsic and introjected; <i>"I was such a striver"; "I was not creative, more a type that follows the scheme, very loyal to the system"; "I got bad conscience if I made bad [not as coach expected] choices."</i>	Obsessiveness; <i>"The sport and competitive culture nurtured my extreme personality ... there was the swimming that organized and controlled my life."</i> Exhaustion, minor depression: <i>"Overall, it became very exhausting ... I had periods where it was hard mentally to live as the student conducts with that lifestyle ... it was mentally tough."</i>

Note. The performers are ordered relative to their quality of motivation, ranged from most adaptive (intrinsic, autonomous) to less adaptive (extrinsic, controlled).

One musician stated, "It is so small here, few employees, a small administration, so it had to be more of a collaboration ... I thought it was nice, it didn't feel like a school, it felt more like a big messy family" (2m).

The performers reported mostly authoritative teachers and coaches (high demands, personal support; Walker, 2008), including positive memories of being cared for, seen, and supported: "He was very aware of my

situation, and expressed that I could come to him at any time with any type of problems. He was very warm; he was like a father to all his students” (2m). Some performers (5d and 8s) criticized the Norwegian way as “too nice” for a TD program. A dancer said, “I felt that it was a bit too much ‘cuddling’ ... it was rather too much than too little appraisal I think” (5d). Other performers (3m, 7s, and 8s) experienced their teacher or coach as more authoritarian (controlled and distanced; Walker, 2008). They described a system that expected obedient students who adapted to the system, and faced negative consequences when challenging or actively opposing the training regime. As a musician explained about trying to suggest a more creative path in contrast to the traditional way: “I had the feeling they didn’t want me to be there ... I felt they didn’t get me ... I really wanted to start develop my own ideas ... but I had to adjust to their system” (3m).

Being part of small groups also enhanced relatedness between peers, something all performers highlighted as positive and motivating. A swimmer said, “We were just four swimmers in each class, it made us very close, and we shared a lot of experiences” (9s). Performers in all domains stressed that the way they shared their passion nurtured their motivation: “Young people who were just like me, loving playing music. I realized that I was not alone. It was very inspiring and motivating” (2m).

Elite TD layer

High-performance deliberate practice. The performers described their elite programs as focused on TD and professionalization, aiming to educate top performers: “The school was the closest you came to professional life at that age level. You couldn’t find any better place to develop your talent” (8s). They described exceptional teachers and coaches, with extensive knowledge and experience, who contributed fundamentally to their learning and development process. A musician stated, “Well, it was a good place to be if you wanted to get, to gain a lot from it as a child, doing it a slightly serious way” (1m). The schools provided structure, routines, and systematic development plans. For young performers living away from home, the well-structured school system helped create routines and safe frameworks in which to evolve: “It was a very good system, well organized ... It was such a system that took care of us all the time” (8s).

These TD schools were also described as highly performance-oriented (Roberts, 2012), with high expectations, and demands to push performers to reach their

potential: “When I was there, I was pushed a lot. We worked so well; effective and intensely and we joined in on a lot of events” (1m). Performers described a culture that focused on and favored “the best.” All had experienced or witnessed discriminatory behavior based on effort, competence, and success; granting more attention and advantages to the most dedicated and successful “star” students: “It was a lot of favoritism and stuff, I felt, from the top” (6d).

All performers reported relatively early specialization and long-term participation. Many (6 of 9) also had families who participated actively in the fields (e.g., former performers, coaches, or teachers), and practically grew up within the practice community. For instance, a swimmer stated, “It was the one thing one did in my family” (7s), and a dancer said, “I grew up in the Opera house ... I watched my mother at work, sat in the wardrobe, played with her pointe shoes, watched her perform at stage ... there was no other alternative” (5d).

Controlling learning conditions. The performers perceived the teachers and coaches as authorities holding a gatekeeper position, often having been successful performers themselves: “I really had such an excessive respect for the coach ... It was more authoritarian when I arrived at the talent school ... I was afraid to make mistakes” (8s). The teachers or coaches became important people to develop a relationship with, whereas revealing incompetence, weakness, or disloyalty, or disappointing them, was something the participants had feared. The latter could hamper their social position and their chances of developing, as a musician stated: “You noticed which orchestra you were allowed to take part in, and what events and concerts you were selected for ... I think that it surely was not fun to be there if not being at a certain performance level” (1m).

The TD schools in all domains were perceived as being teacher or coach led, operating within structures of inherited systems and inflexibility. A swimmer said, “There was very little dialogue. The coaches had dialogues, but I was not included in them” (7s). Combined with the teachers’ and coaches’ roles as authority figures and gatekeepers, the power distribution was perceived as unequal. The performers described a practice of following instructions, being highly disciplined and hard-working, and showing no disagreement: “You are raised not to answer back, not to criticize or to ask questions. You do as you are told, even if you disagree” (5d). The performers told many stories about blindly doing, and adjusting to the system, but regretted, in

retrospect, not being able to be more self-determined. A swimmer stated, “I only followed the scheme as a slave, without asking any critical questions” (8s).

Despite domain commonalities, nuances were also evident, regarding how the controlling conditions were manifested. The controlling conditions in swimming and ballet seemed to be interwoven in given structures and teacher- or coach-initiated activities, based on pre-determined and time-consuming methods and routines for training, eating, resting, and sleeping. In music, however, performers were expected to dedicate significant amounts of time to individual practice, with occasional one-to-one instruction and collective orchestra attendance. Thus, the musicians were more able to self-regulate, and decide when and how to practice. However, the performers still felt that their teachers indirectly controlled them by judging the quality and quantity of the performers’ practice: “It could have been more focus on the learning process ... I felt pressure from the teacher and that we didn’t have time to stay in the process” (3m).

Arts-specific layer: Distinct traditions and belief systems within the arts

The ballet and music performers reported aspects that were not present in the swimmers’ accounts. Operating within experience-based conservatoire traditions, the performers reported a tacit knowledge culture. A dancer said, “I experienced it here as well [in the ballet company], that dancers don’t have any vocabulary; dancers don’t speak” (4d). It was as if the dancers’ identities were expected to be “invisible,” without revealing any individual or self-determined character: “of course, classical ballet is a heavily disciplined activity ... but I just think that you should be able to show some character as well, even though you’re a ballet dancer” (4d). This affected the way the dancers and musicians expressed the identity and core values inherent in “being a dancer/musician.” When asked what characterized a top performer in their field, the dancers and musicians emphasized values such as modest, respectful, disciplined, and loyal, whereas swimmers spoke of being goal-minded, independent, strong, and enduring. Overall, aligned with these core values, the dancers and musicians expressed more modesty (e.g., doubts about, as well as underestimation of, their own competence) and extreme discipline (e.g., expressed as perfectionistic tendencies).

Driven by a desire to express deep emotions, move others, make a difference, or fulfill a higher existential meaning, artistic activity appeared to be an important motivational force: “I believe it is the self-expression.

An opportunity to personally evolve ... the love for the music and connect with your deep emotions” (3m). Moreover, many of the dancers and musicians described the artistic processes as a gateway to flow, which helped focusing beyond technique and personal achievement, instead centering on being in the moment: “It’s kind of a state that you enter ... I arrive in the morning and then ‘disappear’ until the afternoon. Not until then do you have time to check your mobile phone or something. It is such a lovely experience” (4d). In fact, all performers, not just the dancers and musicians, expressed striving and longing for flow, a state they described as when their bodies just delivered the task, let go of their mind, and became totally absorbed in the performance: “Then I might be able to lose myself in it. Then it may be physically exhausting and everything, it doesn’t matter ... It’s so wonderful” (4d).

Performers’ motivational processes

Individual layer

Motivational characteristics. The performers started out with different motivations. Several (1m, 3m, 4d, 7s, and 9s) reported an inner love and drive, exemplified by a musician: “I always liked to rehearse ... I liked the sound, and I really liked the music made for violins” (3m). All performers expressed some degree of extrinsic motivation. For instance, some participated in their activity to outperform others, or gain status (i.e., external regulation); “I liked to be good at something and to demonstrate competence, like ‘showing off’” (2m). Others gave examples of how they participated to get conditional approval from their family (i.e., introjected regulation): “I think everyone expected that I loved dancing ... but I got more motivated in trying to not disappoint anyone, and I wanted to fulfill being that typical ‘ballerina’” (5d).

Motivational experiences and implications. In the interaction with the motivational conditions set by the TD schools, the performers reported that their motivation was fueled, and challenged, in many ways. Most had been identified as gifted at a young age. In the performance-oriented TD environments, the performers’ gifts were nurtured, and the performers expressed that it was important to be the best, and to maintain their leading status in the group (i.e., external regulation): “I did like that feeling of being the best. I think it motivated me to push myself further in order to keep that position” (5d). This also gave rise to feelings of pressure and stress, of being controlled, and of having to live up to expectations. The same

dancer stated, “From the age 13 to 16 ... I didn’t want to dance at all, but I wasn’t allowed to quit, because I was an identified talent” (5d).

The high-performance deliberate practice provided by the TD schools was another important factor affecting the performers’ motivation. Mostly, the performers expressed gratitude to their school and the systems, and were proud of being a former student. They reflected that the schools, by offering acceleration and enrichment, likely enhanced their chances of professional success. A musician said, “I really feel that I hadn’t become a musician, I [wouldn’t have] chosen that road without the joy and success I experienced, without all I have learned from that school” (1m). The participants also expressed that the TD schools contributed to setting a more professionalized standard of deliberate practice. The performers reported that during those years, they realized that hard work, discipline, and thoroughness, the ability to immerse oneself, and prioritize, were important attributes of success (i.e., integrated and identified regulation). A swimmer said, “It’s about doing what it takes even if nobody watches ... you can’t lean back and believe that the success will come by itself” (9s). Moreover, being socialized within such unique domain cultures (e.g., identified motivation), affected the way they reported dealing with aspects of the controlling conditions. Many of the performers expressed support for the system, and reported experiencing the controlling conditions as culturally meaningful: “It is just the way things are in classical ballet, when you take such an education” (6d). Thus, their submission to the system, internalized rather than externally controlled, was experienced as voluntary, and in line with their own values and beliefs; thus, partly self-determined. Overall, being within such positive circles of hard quality work, mastery, and enjoyment were expressed as a motivation boost:

Those years contributed to build a fundament ... It set a standard for what I knew I could accomplish, also personally. It was nice gaining those results. It was important as a “storage of self-esteem” ... it equipped me with a motivation that grew larger and larger ... already back then, I decided to aim for the Olympics. (9s)

The participants revealed motivational adversity as well. They told stories of fear of failure, feelings of pressure and high expectations, and of not being the best and favored student. Especially performers with less robust motivation (i.e., introjected and external) reported more challenges and frustration when faced

with adversity (e.g., failure, stagnation, injuries, and overtraining). A swimmer said, “It was such a feeling of failure ... and it made you very frustrated, both at practice and in competition” (7s). They also reported fluctuating motivation. One swimmer described stagnation periods: “It was several days that I skipped some training, and didn’t have the energy” (7s). The inner love for the activity seemed to have faded: “Sometimes it is actually very difficult to find the motivation to perform. Now it is definitely work, and not leisure” (4d). In contrast, the performers who possessed autonomous motivation coped better during periods of failure and stagnation, such as the musician who said, “I tried to look at it [failure] in perspective. I think I tried to learn and evolve from the experience, and not just be upset” (3m). Additionally, these autonomously motivated performers reported more enduring motivation: “I would say that I usually don’t give up ... I work toward my goals, until I reach the task at hand” (3m).

The performers reported frustration when faced with a controlling teaching or coaching style. Even one of the most intrinsically motivated performers (3m) expressed frustration with the rigid and controlling conditions: “I think it made me less motivated ... I believe I could have developed more ... I didn’t feel free on the stage. It made me insecure and stiff” (3m). The more externally driven performers’ (1m, 2m, 4d, 5d, 6d, 7s, and 8s) frustration was even more visible. They reported competence frustration (e.g., stagnation, failure, or doubts), for instance, expressed in fear of failure: “to perform in front of others, to play for others. Such performance things ... I have always been afraid, because I know how I react when I fail. That it is terrible. Very difficult to leave behind and forget” (1m). Ambiguity about one’s own ability and competence was also reported: “All the time, I have a feeling of doubt in my head; ‘maybe this isn’t meant for me?’ Today, still, I have a constant feeling of doubt” (2m). For some of the dancers and musicians (1m, 4d, and 5d) competence frustration was manifested in perfectionistic tendencies: “I thought that it was only perfection that counted. I did experience mastery as well, but mostly I experienced failure” (4d). For instance, some discussed strategies as over striving: “The effort I had to do to make progress each day ... It has been very all-encompassing ... It occupies so much time” (4d), other of obsessiveness: “It was seldom fun before ... maybe 5%–10% enjoyable, and 90% kind of intense feeling of ‘this is my thing, this is just what I have to do’” (5d).

The performers revealed that close relationships (e.g., teachers or coaches and/or peers) affected their motivation very positively. By offering the performers

care and support, teachers or coaches provided a safe haven for performers to develop in: “It was so safe and nice ... I found both the needed motivation and self-esteem and all the technical help I required” (2m). Additionally, autonomy-supportive teachers could boost intrinsic motivations, as stated by a musician:

He made me believe in myself, that I was a unique musician, that had something unique to express, and that it was really worth it, that I could make it ... it made me want to practice far more than ever before. (2m)

Finally, the artistic processes were something the dancers and musicians reported as highly positive and motivating. Described as a gateway to flow, artistic processes were experienced as deeply meaningful, thriving, and self-realizing (i.e., intrinsic motivation): “I actually don’t like to practice dance, the training. No, I like the artistic processes ... to express, gestalt a character. I like the theater as an institution. I find it thrilling and exciting” (4d). However, the performers explained that flow was hampered when they focused too much on technical skills, and on reaching peak performance (i.e., external regulation). As a swimmer said, “My best races when I was a junior, they just floated on their own. My body just did it. Later on, I just overanalyzed everything and tried to find that old good feeling, so I started speculating, analyzing, and pondering” (8s).

Well- and ill-being experiences. The analysis revealed that the performers, in line with their differentiated motivational experiences outlined earlier, also reported distinct motivational implications (for details, see Table 3). In general, the complex motivational processes experienced while attending the TD schools had a wide range of implications. All the performers reported some aspects of well-being (e.g., self-realization, belonging, and positive affect), exemplified by this musician: “I experienced joy through the music, and deep feelings ... and it was fulfilling to share these experiences with others, being part of a thriving environment, and make close friends” (1m). Elements of ill-being were also present (e.g., performance anxiety, stress, and negative affect), reflected, for instance, in the exhaustion of a swimmer: “The conflict with the coach made me exhausted ... I was extensively injured and sick in periods” (7s). Or in perfectionism and performance anxiety echoed by a dancer: “I found it uncomfortable being on stage ... I didn’t want anybody to see me ... I felt that there was so much that was not good enough” (5d). However, there were clearly individual differences in

how the overall TD story was perceived: that is, if it was a story mostly of thriving, striving, or just of surviving. Performers with aspects of controlled motivation reported a wider array of, and in some cases, more severe, risk factors and personal costs. In particular, these performers reported struggling more with low self-esteem (1m, 2m, and 5d), perfectionism (1m, 4d, and 5d), obsessiveness (5d and 8s), performance anxiety (1m, 4d, 5d, 6d, 7s, and 8s), negative affect (6d and 7s), exhaustion (7s and 8s), and eating disorders (5d). In contrast, the performers with aspects of autonomous motivation emphasized aspects of well-being to a greater extent, including self-realization (3m, 4d, and 9s), flow (2m, 3m, 4d, 7s, and 9s), enhanced self-esteem (9s), positive affect, and vitality (1m, 2m, 3m, 4d, 7s, and 9s).

Discussion

In this study, we aimed to explore the motivational experiences of elite performers. Although we should be cautious drawing conclusions based on interview data from a single study, the overall patterns identified in the analysis led to stimulating knowledge and reflections. In this discussion, we reflect on how the performers’ TD learning conditions related to their motivational processes and experiences of well-being.

TD manifested within the arts and sports

High-performance TD cultures

The TD schools in music, ballet, and sports shared many characteristics. For instance, all facilitated autonomous motivation (e.g., the Norwegian way, close relationships, student-centered, and artistic dimensions), and controlled motivation (e.g., performance-oriented, discriminatory behavior, and a controlling teaching or coaching style). However, when the ambitions of demonstrating excellent performances seemed at stake, attaining such a performance seemed the most important, no matter the psychological costs, thus, resulting in a culture that was more predominantly controlled. These performance-oriented and controlled practices unfolded as two-sided: They could provide a boost of competence development, underpinned by high demands, hard work, quality teachers or coaches, and professionalization. For ambitious performers aiming for the top and operating within a positive cycle of development (e.g., mastery, success, flow, and high self-esteem), this seemed to work well, providing a strong nurturing source of motivation. Competence seemed to be the core “currency” within these contexts, aligned

with findings from another recent Norwegian study (Stabell, 2018). However, in the face of failure and adversity, the performance-oriented culture revealed a downside. As the very essence of becoming an elite performer is about demonstrating superiority, the performers' positions and future possibilities were experienced as conditional on achieved competence and success. Stagnation and failure were challenges that clearly put the performers' quality of motivation to the test, as other studies also have highlighted (Chiviawosky, 2014; Mahoney et al., 2014).

Different facets of controlling conditions

In addition to the high-performance TD culture, controlling conditions turned out to be quite common across the domains. The performers revealed that there were nuances in how control unfolded within the three domains. For instance, in ballet and swimming, control appeared to be more directly interwoven in rigid structures and routines, while in music, control appeared more indirect, found in the one-to-one relationship with teachers who monitored and judged the self-practice top-down. This result is in line with results from other studies that revealed students often experience a lack of autonomy, as they are taught *what* to practice rather than *how* to practice (Burwell & Shipton, 2013; Gaunt, 2008; Hatfield, 2016). The distinct traditions and belief systems in music and ballet, seen as tacit, top-down, and with skewed power (Nielsen, 2006; Stabell, 2018), seemed to also indirectly control the dancers and musicians into being more obedient and loyal than the swimmers. An interesting observation that is perhaps linked to these findings was that only dancers and musicians exposed self-critical perfectionistic tendencies.

In general, controlling teaching or coaching styles appeared to socialize performers into being less self-determined (i.e., introjected and external regulation). Paradoxically, a lack of self-determination and authenticity are negatively associated with creative and artistic development (Lacaille et al., 2007; Smith, 2002; Subotnik et al., 2011). Moreover, artistic processes might be a source of intrinsic motivation, and a gateway to flow (Nakamura & Csikszentmihalyi, 2009). Other studies of dancers' (Hefferon & Ollis, 2006) and athletes' (Swann et al., 2017) flow experiences found that supportive, secure, and open learning environments (e.g., nonjudgmental, creative, and open goals) are important flow-enhancing factors. Thus, controlling conditions might hamper or reduce flow experiences, intrinsic motivation, and development of artistic competence. Further research investigating associations among personality, motivation,

artistic processes, and performance in the art domains, could be valuable.

Finally, the imbalance between a controlling teaching or coaching style and close relationships embedded in the autonomous Nordic egalitarian model (Arnesen & Lundahl, 2006; Ronglan, 2015) turned out to be somewhat contradictory. The closeness appeared to encourage relatedness and autonomous motivation. However, given the power teachers and coaches held over the performers, the picture looked different. Some performers reported that the benefits of a close and supportive relationship were contingent on loyalty and conformity. When personal relationships become very close, they may camouflage contingent controlling mechanisms, and function as a concealer of power and conditional control (Soenens & Vansteenkiste, 2010). Studies of children (Soenens & Vansteenkiste, 2010) and youth elite athletes (Jacobs, Smits, & Knoppers, 2017) experiencing indirect control have shown them trapped in ambivalent and conflicting relationships, with outcomes of emotional distress and ill-being. The present results were in line with these studies, as they showed that such controlling conditions seemingly nurtured ambivalent experiences that challenged the performers to navigate between loyalty (to leaders, values, tradition) and their own inner needs and well-being. Thus, the role of teachers and coaches, between being quite personal and holding power, requires further research and critical reflection, perhaps especially when embedded in egalitarian contexts.

Implications for motivation and well-being

The performers' "success stories" were related to motivation and well-being in different ways, revealing the innate complexity in developing excellence, as found in other TD studies (Chua, 2014; Larsen, Alfermann, Henriksen, & Christensen, 2013). The performers navigated within and between several contextual layers that provided contradictory and multifaceted experiences. Overall, the performers reported motivational profiles that ranged from predominantly self-determined, via multidimensions, and predominantly controlled. These individual motivational profiles mattered, as their blends of motivational regulation (e.g., intrinsic, identified, introjected, and external; Ryan & Deci, 2017) were associated with more or less robust and healthy TD pathways. Specifically, and as recently suggested by Portenga, Aoyagi, and Cohen (2017), performers regulated by autonomous motivation seem to engage in their performance development in a more joyful, robust, and healthy way, while showing less

dependence on the given conditions. Interestingly, in one swimmer, the combination of strong autonomous motivation, success, and high self-esteem not only affected the performer's development but also underpinned the power to negotiate and influence the contextual conditions in a more self-determined direction. Thus, the interaction emerged as reciprocal.

In contrast to how elite performers have sometimes been described in the literature (Jordet, 2016; MacNamara et al., 2010), many of the performers in the present study lacked an original intrinsic motivation, and only two performers expressed a predominantly autonomous motivation throughout their careers to date. In line with SDT tenets (Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013), analyses showed that the more controlled, the higher the vulnerability (e.g., contingent on success and perfectionistic tendencies), and in turn, the more the maladaptive outcomes were (e.g., negative affect, exhaustion, and performance anxiety). A darker side of TD was especially evident in the performers who appeared to lack autonomous motivation and autonomy-supportive environments. According to SDT, when regulated by controlled motivation, the self might become ignored, suppressed, and at risk of being diminished (Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013). For instance, perfectionism may represent such suppression. As a strategy of over-striving to compensate for low self-worth, perfectionistic performers strive for a perfect "ideal-self," and suppress their authentic self (Hall & Hill, 2012; Hill, 2016). In a debilitating circle of negative emotion (frustration, negative affect, and stress), cognition (guilt, shame, and performance anxiety), and behavior (rigidity, obsession, and eating disorders), the performers' self seemingly will become diminished. Several performers in the present study bore witness to unpleasant roads to success, and partly mirrored findings from other sports domains (Cavallerio, Wadey, & Wagstaff, 2016; Jacobs et al., 2017).

As the participants in this study were all successful, these results deviate from the discourse of TD as positive development, driven by self-actualization, intrinsic motivation, and psychological comfort. Instead, the results may indicate that adversity, striving, imbalance, and even perfectionism, self-criticism, and emotional despair can be means to an end in preparing for greatness (Subotnik et al., 2011). Even if these results are clearly at odds with evidence from SDT-based research and pedagogical ethics, the results are similar to those in other studies of dance, music, and gymnastics that have raised awareness of unethical learning conditions, the prevalence of psychological, and physical, risk factors, and compromised mental health (Cavallerio et al., 2016; Nordin-Bates & Abrahamsen, 2016; Pecun et al., 2018).

Thus, it would appear that the performers' success came at a relatively high price in terms of compromised well-being. Even less adaptive motivational experiences might have unfolded with less successful performers (e.g., who faced more adversity and consequently dropped out), something to explore in future studies of TD. Thus, in our view, it might be wise to broaden the definition of success, to include sustained positive psychological functioning alongside reaching excellence when facilitating TD, as recently addressed (Hill, MacNamara, Collins, & Rodgers, 2016; Ivarsson et al., 2015).

Strengths and limitations

The richness of the data (e.g., the complexity and the contextual layers) and the sociocontextual comparative angle are strengths of this study. We believe the qualitative approach disclosed unique motivational processes and TD pathways, extending the SDT and TD literature. However, we must address certain limitations. The study was retrospective (looking back, knowing "how it all turned out"), and the small sample targeted performers' perceived experiences (e.g., not triangulated with observations or leaders' perspectives). Thus, knowledge claims, especially regarding motivational conditions and potential domain differences, should be seen as preliminary. Therefore, we encourage cautious interpretation of the findings, and in relation to other relevant studies, as well as additional studies in these contexts.

Concluding remarks

This study examined the TD learning conditions, motivational processes, and implications of Norwegian elite performers in music, ballet, and swimming. The interaction between conditions (*where* you are) and personal characteristics (*who* you are) affected the performers' motivation and psychological functioning (thriving, striving, and/or surviving) in different ways. The performers navigated within and between several contextual layers (i.e., egalitarian values, high-performance deliberate practice, and controlling conditions) that provided contradictive and multifaceted motivational experiences. However, the quality of the performers' motivation mattered, as performers regulated by autonomous motivation reported being more psychologically robust and less dependent on the given conditions, and experiencing a wider range of thriving.

From an applied perspective, it is important to be cognizant of the innate complexity in developing excellence and potentially negative outcomes from aspects of controlling conditions, such as increased psychological vulnerability, controlled motivation, perfectionism, and performance

anxiety. However, enhancing autonomous motivation and flow, supportive relatedness, as well as focusing more on creativity and artistic dimensions when teaching, may counter these risks. In conclusion, the findings are critical reflections on Norwegian TD in music, ballet, and swimming, with clearly identified potential for improvement, furthering high-quality educational practice alongside healthy motivational processes.

Note

1. Swimming became the chosen sport, as it is an individual and highly technical sport with international prevalence and high amounts of deliberate practice at a young age. Thus, swimming has comparable features to ballet and classical music.

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No potential conflict of interest was reported by the authors.

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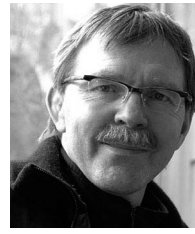
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