

Module 5 Independent Study

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“If Intrinsic motivation exists, can it be used to improve learning outcomes in the voice studio and what factors enhance or reduce it?”

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ASSIGNMENT 1

Introduction

Background

This study is situated (Lave and Wenger, 1991) in a performing arts college at which the author has worked since 2016, a boarding school music department, and in private practice. The college students have a full timetable which is heavily weighted towards dance, and a significant proportion have had limited vocal training prior to their enrolment on the course. The Music Theatre degree is designed to produce the 'triple threat' performer; one who is equally competent in singing, dancing and acting (Agrifolio, 2021; Diamond, 2021; Cuny, 2022; Collier, 2023 UWTSD, 2023) however, in an overcrowded industry (Bård, 2017) it is desirable for students to aspire to similarly high proficiency in these three artistic disciplines to optimise employability (Glasheen, 2017).

Rationale

This paper seeks to investigate the existence of intrinsic motivation, and if evidence suggests it as a reality, whether it can be influential in the voice studio, potentially enhancing student motivation. The author has observed that limited experience in singing prior to enrolment, coupled with the demanding, dance-biased schedule at the college, may have contributed to a lack of motivation in singing. In the context of the private voice studio and boarding school, student motivation can be influenced by a range of factors (CIOMIT Team, 2022; Burak, 2014). Younger students, for example, may not have chosen to study voice, their parents having decided for them, and parental reasons may vary. A student may be enrolled in voice lessons to provide a supporting study to their first instrument for the purpose of scholarship, or A level requirements. Additionally, they may believe that studying voice/music will promote confidence (Swain and Bodkin-Allen 2017; Dai and Schader, 2001) or that studying music improves academic attainment (Baker, Hallam and Rogers, 2023; Brown, 2012; The Royal Conservatory of Music, 2014). Others may wish to develop and support their child's talent through tuition or the young person themselves, may express a deeply held wish to sing (Renati, et al., 2022). Ultimately, the decision to take singing lessons, and the choice of teacher, is made by the parent or care giver, who is the one funding their musical education (Dai, and Schader, 2001). A practise regime is important to make progress and motivation to practise can be negatively affected by various factors; these will be explored throughout this work. By exploring negating factors to motivational states, such as lack of experience and/or competence, and factors that may be stressors, this study seeks to find ways to enhance motivation.

Aims & Objectives

Aims

The aim of this study is to investigate motivation and its role in student learning.

Objectives

- ☐ To define motivation.
- ☐ To contrast external and intrinsic motivation.
- ☐ To explore how different types of motivation can impact student learning.
- ☐ To explore factors that diminish motivation
- ☐ To explore factors that enhance motivation
- ☐ To establish practical tools and application techniques to increase student motivation.

Methodology

A rapid review (Smith and Nobel, 2015) will be used to assess the quantity and scope of literature on the subject of motivation. Rapid reviews are useful to make a general assessment of the quantity and variety of research that exists, whereas systematic and scoping reviews, though rigorous are time consuming and often require more than one researcher (Bouck, Straus, and Tricco, 2022, Plante, 2023). Smith and Nobel describe the process of rapid review in the following steps: After formulating a research question, clear inclusion and exclusion criteria should be established. The years of inclusion should then be decided, the databases that will be searched, and the choice of the search terms that will be used. The results of the searches should be evaluated for validity and any duplicates eliminated. After the abstracts have been read, any studies that are irrelevant to the review should be discarded and the resulting studies summarised. Papers should be categorised and findings synthesised and discussed, concluding with a summary of the research. The second assignment will be a narrative review of literature, which although less rigorous than systematic reviews and prone to bias, is more discursive (Jahan, et al. 2016). Utilising data from the rapid review but narrowing the focus to answer the research question, the narrative review will provide an overview of intrinsic motivation (Jahan, et al. 2016; Smith and Nobel, 2015). The results from the rapid review may be augmented using citation chaining and berry picking techniques (Bates, 1989), exploring the reference lists to find additional material and tracing authors who have cited the initial study in their own work. The findings from the reviewed studies will be discussed and conclusions drawn to answer the research

question. The databases PubMed and Academia will be searched. Additional searches will include Google scholar. Search terms for the rapid review will be: intrinsic + extrinsic + motivation + singing + students. Papers that are written in English, or where an English translation is readily available will be considered for inclusion. Studies undertaken between 2000 and 2023 will be prioritised, but seminal research from earlier than 2000 may be included. Research carried out in educational environments or where music or singing students were the participants, will be also be prioritised. Studies published earlier than 2000 and those that do not directly pertain to the research question will be excluded, as will studies published in languages other than English where no translations are available. All research papers considered for inclusion will be peer reviewed.

Expected learning outcomes

In writing this review of literature, the author intends to gain a clear understanding of what constitutes motivation, what enhances, and what reduces it. This knowledge will enable the author to have a better understanding of student perspectives, and factors that may be impacting their motivation, of which she is currently unaware. The author hopes that new incites will foster empathy between practitioner and students (Meyer, et. al., 2019) enhancing student centred pedagogy (O'Neill and McMahon, 2005) and self-regulated learning (Panadero, 2017).

An examination of techniques and strategies that boost motivation will enable the author to improve her pedagogical methods.

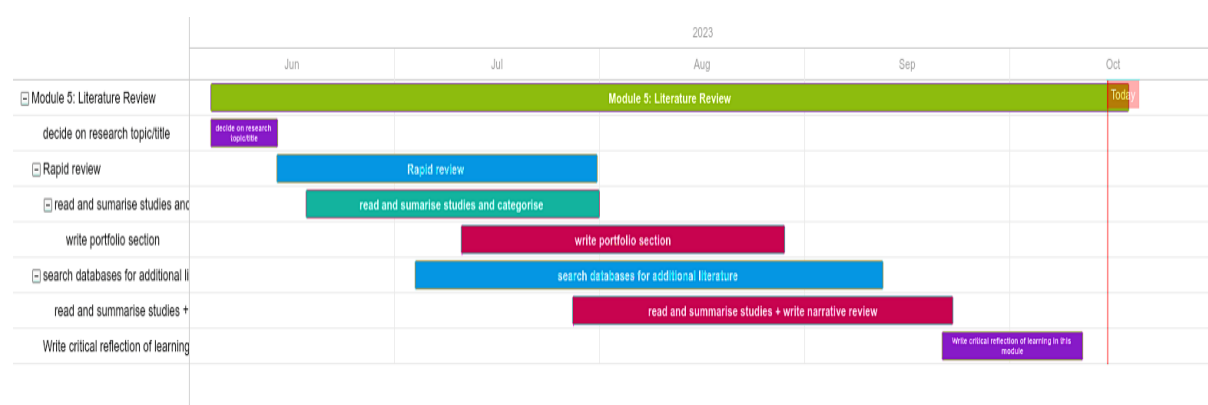


Figure 1. Gantt Chart of Planned Timetable

What is motivation?

Mullins (2002) describes motivation as “a driving force” however, Cambridge Dictionary (2023) defines motivation as an enthusiasm or need for undertaking a task. Rea (2009) suggests that motivation is the interaction between personality and circumstance, whereas Maslow (1987) asserts that motivation is constructed from a hierarchy of needs (Rojas, Mendez, Watkins-Fassler, 2023). Weinberg and Gould (2007, p.52) define motivation as “the direction and intensity of effort” meaning that motivation is a gauge of energy and time expended on a task. In summary, intrinsic motivation is an enthusiasm or need to pursue a goal or participate in an activity that is originated from feelings coming from within the individual (intrinsic). An inner force that stimulates action towards a goal (Schiefele, 1991). Deci and Ryan’s numerous investigations into intrinsic motivation conclude that individuals can be intrinsically motivated given the existence of certain factors: A sense of freedom or “autonomy”; A social connection or “relatedness”; and the requisite skills to succeed in the endeavour or “competence” (Hoff, Carlsson and Smith, 2012).

“Intrinsic motivation was the drive to learn, the curiosity to experiment and discover, the motivation to develop endurance, and the will to cultivate a unique form of expression.” (Stephenson, 2018, p. 407)

Extrinsic motivation and how does it influence intrinsic motivation

Extrinsic motivation is a compulsion to act initiated by external forces (Deci and Ryan, 2000b). These could be physical such as a pay cheque, trophy, or certificate. Alternatively, one could be motivated by the desire for recognition, approval, or to avoid punishment or penury. Essentially rewards or punishments, and the fear or expectation of these, are external motivation. Over-justification effect (Deci, 1971) is postulated to be a state where intrinsic motivation is reduced when external incentives are offered. During three days solving puzzles (Deci, 1971) participants were paid on the second day, and increased effort was noted during the break, when participants were seen to practise. On the third day participants were not paid and did not practise. The researchers concluded that the payment on day two had demotivated the participants, however Derfler-Rozin, and Pitesa, (2020) contend that the Deci (1971) research was flawed, in that the withdrawal of a payment would de-motivate participants, not the payment in itself. Eisenberg and Cameron (1996) were also critical of Deci’s study (1971) asserting that the withdrawal of a reward is de-incentivising, but not the external motivation of reward per se. Additionally, Eisenberg and Cameron (1996) argue that observations made of the participants in intervals between tests in the Deci study (1971) was less valid than participant self-reports of motivation would have been.

Goal contents theory (GCT) posits that the external motivation of goals, fulfils the needs of individuals by affecting their sense competence and autonomy (Ryan and Deci, 2017). The implication of GCT is that extrinsic motivation is influential, but intrinsic motivation is more beneficial to wellbeing (Bradshaw, 2020; 2023). Cognitive evaluation theory (CET) (Deci, Koestner and Ryan, 1999; Reeve, 2023) asserts that extrinsic motivations affect self-concept of individuals which either enhances or diminishes intrinsic motivation. Verbal feedback that provides the results improves motivation, whereas praise alone reduces it (Wisniewski, Zierer, and Hattie, 2020). It could be that praise is considered to be evaluative and judgmental, therefore reducing feelings of autonomy, whereas as feedback of results provides information regarding competence, and possible clues of how to improve outcomes (Deci, Koestner and Ryan, 1999). Rovetta and Abate (2021) concluded that the home team advantage at sporting fixtures was due to cheering from crowds and to a lesser degree, familiarity of surroundings. The self-concept of teams may be been boosted by cheering supporters which confirms their competence, however, cheering does not provide information, only praise, which seems to contradict Wisniewski, Zierer, and Hattie (2020).

Volunteers who were offered minimal pay had reduced intrinsic motivation relative to workers who were not paid (Frey and Goette, 1999). Additionally, workers who were paid a moderate amount worked less effectively than unpaid workers. It could be that the unpaid workers felt that they were acting altruistically which increased self-concept, whereas paid workers reframed voluntary activity as employment, and then equated what they were paid, to how they were viewed (Deci, Koestner and Ryan, 1999). Maths and English students were given a fee to take a test and some were additionally given a performance fee (Hendijani, et al., 2016); the study found that the performance fee did not diminish intrinsic motivation, which contradicts CET in which monetary rewards reduce intrinsic motivation. If participants are not paid they perform well if the activity is seen as autonomous and positively affects self-concept, if offered a financial incentive which adequately reflects effort, motivation is similarly high but moderate to low pay reduces motivation (Gneezy and Rustichini, 1998).

Studies conducted in normal work environments concluded that pay incentives are strong motivators for employees (Gerhart, Rynes, and Fulmer, 2009). When performance related pay was introduced, workers with repetitive jobs were demotivated and it was hypothesised that the imposition of external control was the cause (Gagne, and Deci, 2005). Performance related pay, however, motivated workers when tasks required minimal cognitive input (Gagne, and Deci, 2005). This suggests that motivation, in the context of performance related pay, seems to depend on the quantity of cognitive input; the more complex the task,

the more performance related pay affects stress and motivation. When mundane or dull tasks were incentivised with rewards, or a competitive element, participants were motivated (Cameron, 2001). Deci et al. (2001) issued a rebuttal to this study arguing that the inclusion of uninteresting tasks, skewed the findings. Rewards offered for competency (Rosenfield, Folger and Adelman, 1980) do not negatively affect intrinsic motivation; if the reward is for quality then it has been found to be effective, (Hoff et al. 2012).

Is Intrinsic Motivation a Myth?

Opposition to Deci and Ryan (2000) is offered by Karson (2014) who asserts that intrinsic motivation is a myth. Karson (2014) states that there are always hidden reinforcers of behaviour, such as goals, reputation, sense of duty, and therefore nothing is intrinsically motivated. Furthermore, behaviours are quickly adopted if found to be effective (reinforced) (Karson, 2014). There is frustration if an expected result is not forthcoming, when that behaviour has been reinforced consistently. Individuals are motivated by operant conditioning (trained through repetition) to repeat a behaviour and are confused if a situation in which the result was predictable changes (Seifert, 2015). If reinforcement is not consistent, resulting in only occasional success, individuals are slow to abandon the behaviour following repeated failure, and experience longing rather than frustration (Karson, 2014). Hope is perhaps a better expression than longing, as when reward is intermittent, individuals are hopeful and continue to participate in the activity (Angood, 2022). As adults we learn how to conceal reinforcers so it becomes harder to decode behaviour, whereas children are more overt (Karson, 2014; Goffman, 1963). The implications of this could be that adult students who appear to be motivated during lessons, might be masking their demotivation.

Reiss (2013), has been vociferous in his counter argument to Deci and Ryan (2000; 2008) also claiming that intrinsic motivation is a myth. Reiss argues that teachers awarding students stickers as rewards for good work, are motivating them extrinsically and additionally affirming the students efforts (CIOMIT Team, 2022). He therefore contends that overjustification theory (Deci, 1971; Deci and Ryan, 1985; Lepper, et. al., 1973; Levy, et al. 2017) where external rewards are seen as de-motivating is wrong. This argument does appear valid and perhaps Deci and Ryan's overjustification is an oversimplification as extrinsic rewards are not always de-motivating and their effect can vary depending on the circumstance (Gagne, and Deci, 2005), the type and frequency of the reward (Hendijani, et al., 2016; Rosenfield, Folger and Adelman, 1980), and whether it is expected or a surprise (Deci, 1971). If a person working towards a goal is rewarded when they reach it, perhaps the reward was the goal and an intrinsic motivator (Tricomi and DePasque, 2016; Di Domenico

and Ryan, 2017) however, unanticipated benefits from reaching the goal such as satisfaction in the achievement, would act on the reward system but may foster intrinsic motivation for future goals (Hennessey, 2010; Gurler, 2021).

Results of rapid review

The search results have been categorised and summarised below. Studies have been included based on their relevance to the research question.

Neurological studies

In searching databases for studies regarding intrinsic motivation and singing, several studies were found involving birds, which had ramifications for understanding the neural substrates of intrinsic motivation in humans. The brains of songbirds have been found to be similar to human brains (Jarvis et al. 2005; Jarvis, 2006; 2008) therefore findings from neurological studies of songbird motivation could help explain human motivation. Endocannabinoids, which like endogenous dopamine, are chemical messengers made by the body, and have a similar effect to cannabis, affecting memory, appetite, and a range of other vital functions (Reggio, 2010). These were found to affect the dopamine system, which Calabresi, et al. (2007) state regulates behaviour, volition of movement, cognition and reward, influencing the motivation of songbirds to sing (Kim, and Kojima, 2022). When dopamine was artificially suppressed song frequency was reduced (Kim, and Kojima, 2022), concurring with an earlier study that concluded that dopamine affected motivation of undirected song in zebra finches (Kim et al., 2021). The urge to sing was differentiated from enjoyment of the act of singing, and these two states were controlled by different chemicals (Kim et al., 2021). Urge is linked to dopamine and enjoyment to opioide-peptides which are neuromodulators (brain chemicals enhancers) (Hahn, et al., 2017). Opioides affected intrinsic reward (innate pleasure) and when dopamine suppressants were administered, this reduced the birds' motivation to sing, therefore dopamine levels are critical to intrinsic motivation (Stephenson et al., 2020; Kim et al., 2021).

Riters (2010) found that opioid neuropeptides are pivotal in the reward system of mammals and songbirds, and dopamine is key to motivation. Her review of literature (Riters, 2010) found that deafened birds had a reduced vocal output (Brenowitz et al., 2007; Horita et al., 2008; Jarvis and Nottebohm, 1997, Jarvis et al, 1998) yet when unimpaired birds were played recordings of their own singing, their song rate increased, hence hearing their own song motivated them to sing. Zebra finches were trained to set off song recordings by pressing a button (Adret, 1993; Tchernichovski et al., 1999); similar experiments with chaffinches and starlings found that birds chose to trigger recordings of their own species' song, (Gentner and Hulse, 2000; Stevenson-Hinde, 1972; Stevenson-Hinde and Roper,

1975). Singh and Iyengar, (2022) found that birds preferred live birdsong to recordings concluding that “social interactions were important” motivators. The implication of this research may be that listening to songs could stimulate humans to practise singing, which would be an interesting direction for future research. A recent study found that communication in person was more influential neurologically to people than communication via video link (Zhao, et al., 2023), which is similar to the findings regarding birds of Singh and Iyengar (2022). Voice lessons via zoom may therefore be less motivating than live lessons for both student, and teacher.

Dopamine may be implicated in intrinsic motivation in humans (Gyurkovics et al., 2016) whereas opioid peptides are linked to the human reward system (Froehlich, 1997) which are brain structures that communicate physical and mental reward (Lewis, et. al., 2021).

Enjoyment is linked to opioid peptides whilst desire is mediated by the stronger dopaminergic system, meaning that urge is stronger than reward feedback (Berridge and Robinson, 2016). Potentially, the desire to sing may be more potent than the pleasure from the act, but any enjoyment in singing will increase dopamine levels and foster a renewed urge to sing. Cholecystokinin (CCK – a hormone made in the small intestine which is released during digestion of proteins and fats) (Okonkwo, Zezoff, Adeyinka, 2023) acts antagonistically with opioid peptides reducing motivation and inducing feelings of anxiety (Crespi, 2019; Hebb et al., 2005). It has been suggested that people with severe obesity are resistant to CCK which modulates hunger (Okonkwo, Zezoff, Adeyinka, 2023) so they are not satiated, and crave food (Hebb et al., 2005; Crespi, 2019). There are different kinds of dopamine neurones, some are connected with seeking reward and others with general motivation (Bromberg-Martin et al., 2010). Dopamine levels are critical in cognitive control and dopaminergic drugs may have the unintended effect of reducing cognitive control in individuals with high base line levels of dopamine (Cools et al., 2019). The dopaminergic system is activated when desire is experienced and many studies into addiction have also highlighted its effects (Wise and Robble, 2020). This may suggest that addiction is a heightened form of intrinsic motivation as both drug addiction and intrinsic motivation have been linked to the dopamine system (Meyer, King, and Ferrario, 2016). Drug addiction lessens the effectiveness of dopamine receptors, which reduce motivation for activities that were unconnected to drug reward (Wise and Robble, 2020). The dopamine system motivates individuals to seek the reward of addictive drugs and calorific food whilst simultaneously reducing other motivations, thus affecting behaviour (Volkow, Wise and Baler, 2017). Dopamine neurones may be responsible for reward prediction and motivation towards a goal (Lerner, Holloway and Seiler, 2021)

Dopamine and intrinsic motivation in humans

Psychological studies

Self-determination theory (SDT) posits that intrinsic motivation is comprised of personal freedom (autonomy), ability or necessary skill (competence), and connection to a social group (relatedness) (Ryan and Deci, 2000). Intrinsic motivation is enhanced by easily surmountable obstacles, defined targets and instantaneous assessment of progress (Tricomi and DePasque, 2016; Di Domenico and Ryan, 2017; Ryan and Deci, 2017, p.154). A forty-year meta-analysis of intrinsic and extrinsic motivation (where external factors are influential) concluded that intrinsic motivation endured regardless of external rewards (Cerasoli, Nicklin, and Ford, 2014). Clanton Harpine (2015) argues that “compliance is not motivation” and therefore the only true motivation is intrinsic. Extrinsic motivation, however, is effective if directly linked to quantity of performance and does not necessarily nullify intrinsic motivation (Cerasoli, Nicklin, and Ford, 2014).

Educational settings

Educational researchers Wulf and Lewthwaite (2016) seeking to promote motivation, propose “the OPTIMAL (Optimizing Performance through Intrinsic Motivation and Attention for Learning) theory of motor learning” as a strategy. Their motor learning strategy maximises student autonomy, and increases competence linking to SDT with implications of improved student motivation (Deci and Ryan, 2000). Trainee teachers fostered intrinsic motivation by modelling desirable behaviours, such as enthusiasm (Valerio, 2012). Metcalf and Game, (2006) had similar findings as did Palmer, (2007) who also found that memorable lessons, student autonomy, collaboration, lesson variety, relatedness and positive feedback, improved motivation, again linking to SDT (Deci and Ryan, 2000). Intrinsically motivated students are curious, seek involvement and challenges, and desire collaboration (Williams and Williams, 2011). Work should be made pertinent to students by providing a rationale, and offering a choice of content where possible, and praise for perseverance rather than innate skills, will enhance motivation (Ferlazzo and Sypnieski, 2019). “Gamification” (using tactics employed in game design) is recommended as a motivational enhancement by Buckley and Doyle (2016). Care must be taken when constructing game strategies, however, to include opportunities to make multiple attempts. Effort not mastery must be rewarded and participation should not be mandatory (Furdu, Tomozei, and Köse, 2017). Charts enable students to plot their progress and gives them tangible evidence of improvement (Beale, 2017). Gamification is an example of a useful external motivation and will be examined further in assignment 2.

Music and vocal pedagogy

Initial motivation to participate in music is sparked by the emotional impact of hearing music performed (Woody and McPherson, 2010) perhaps linking to studies of birds (Ritters, 2010). Listening to moving music excites the same brain regions (reward centre) as eating chocolate, sexual arousal and addictive drugs and stimulates dopamine production (Blood, and Zatorre, 2001). Dopamine, as previously stated, is linked to desire. Motivation is stimulated by feelings of connectedness and the opportunity to be expressive, in group singing (Bailey, 2005), linking to the concept of relatedness in SDT and of autonomous self-expression. Comeau, et al. (2019) identified five types of motivation in music students aged 6-17 years: (i) "Amotivation" (unmotivated); (ii) "External regulation" (motivated by supposed feelings of others); (iii) "Introjection" (feelings about self); (iv) "Identification/ integration" (identifies with musicians/choristers); and (v) "Intrinsic motivation" (liking the activity). It could be said that two of the motivational states listed, equate to autonomy (introjection), and relatedness (identification with others) in SDT, so when competence is achieved, the final motivational state of intrinsic motivation will be reached. Competence then, is important for student motivation and songs that are too difficult will be demotivating, therefore care should be taken when choosing repertoire.

Students seemed "out of sync" with their teachers when they were at their most autonomous (Kupers et al. 2015); they had moved from practitioner instructions to self-regulated learning (Legault and Inzlicht, 2013; Panadero, 2017). Guidance is preferable to instruction in stimulating autonomy (Feichas, 2010; Woody 2021; Stephenson, 2018, King, 1993) a factor of intrinsic motivation according to SDT. The integration of world-music and pop into classroom music (Evelein, 2006; Woody, 2021) and the viewing of rock videos, was a strong motivator for students (Cutietta, 1985; Asmus; 2021). These findings could link back to songbirds motivation to sing on hearing their own songs (Jarvis et al, 1998; Adret, 1993; Tchernichovski et al., 1999; Gentner and Hulse, 2000; Stevenson-Hinde, 1972; Stevenson-Hinde and Roper, 1975; Singh and Iyenger, 2022). Practical applications of learning, providing rationales (West, 1994; Ferlazzo and Sypniewski, 2019) and discovering students' 'musical beliefs', creates an environment where ideas and tastes can be shared and challenged, fostering connectedness (Woodford, 1996). By encouraging critical thinking, musical horizons are extended leading to creativity (Woodford, 1996). Teacher influenced motivation is responsible for 20% of achievement in the music studio (Asmus, 2021), and practitioner enthusiasm is motivational to students when modelled (Valerio, 2012; Metcalf and Game, 2006; Palmer, 2007). Intrinsic motivation wanes as students develop, possibly due to more extrinsic motivators (exam deadlines) and

fewer intrinsic rewards (innate enjoyment). Regular rewards for effort are motivating (Ericsson et al., 1990; Burland, 2005) but loose efficacy over time (National Scientific Council on the Developing Child, 2018; Lepper and Hodell, 1989; Asmus, 2021). It was suggested that student attention was on the reward not the learning process and therefore, Asmus (2021) recommends a mix of external and intrinsic motivators, using rewards in the absence of intrinsic motivation.

Critical Reflection

Having chosen the topic of intrinsic motivation for my review of literature, I have considered the tenets of SDT in writing my critical reflection, incorporating Kolb's reflective cycle (1984). Kolb encourages individuals to use new experiences to challenge existing beliefs, and to develop and test resulting concepts formed in the process of reflection.

Kolb's Reflective Cycle

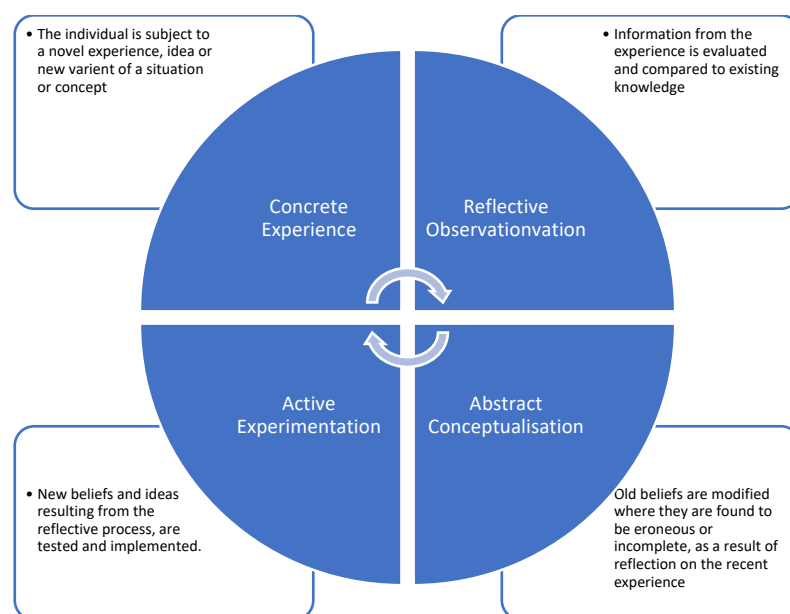


Figure 2. Kolb's Reflective Cycle (Adapted from McLeod, 2023)

Concrete experiences in the voice studio (Morris, 2020) have led to the perception that students struggle with motivation, and my autonomous decision to investigate this topic (Deci and Ryan, 2000). External stressors such as the module deadline and word limit, have encouraged time management and concision. Previous execution of literature reviews has fostered motivating competence in attempting this current challenge. Academic development must be evidenced through skills progression in written work, which is an external motivation (Tricomi and DePasque, 2016) and reflections upon the last module (Kolb phase two) highlighted tutor feedback which had improved my writing by prompting a re-evaluation of

my skills. On receiving the extensive and thorough draft feedback on this current module, I appreciated the effort and care of my tutor (Lizzio and Wilson, 2008; Gaunt, 2004). I was encouraged by comments but was additionally motivated by a sense that some of my writing was disappointing. My sense of relatedness (Kersson-Griep and Witt, 2012; Deci and Ryan, 2000) motivated me to improve the supposed perception my tutor had of me currently, and to make both myself and her proud by executing a worthy piece of writing. I had believed that my work had improved but have had to re-evaluate my skills (Kolb third phase) and will implement advice I have received in future writing (Kolb stage 4).

Knowledge gleaned whilst reviewing literature, has led to consideration of motivators and de-motivators for students, such as tone of voice (Paulmann, and Weinstein, 2023) and unconscious body language (Metcalf and Game, 2006; Palmer, 2007) to suitability of tasks and expectations (Suzuki, 2020). I reflected upon my attentiveness (Stephenson, 2018) and how I interacted in lessons (Estepp, and Roberts, 2015; Carey and Grant, 2015). I have realised that seeking to understand the feelings and motivations of others, effects how I am perceived (Docan-Morgan, 2011). Connectedness fosters trust between practitioner and student, decreasing anxiety for both (Jorgenson et. al., 2018). I have inadvertently modelled the behaviour of my tutor with my own students, resulting in increased relatedness (Valerio, 2012). Through this closer bond, I noticed that student preoccupation can manifest as disinterest but enquiring how a student is feeling encourages explanation and this is appreciated (Stephenson, 2018). Often something prosaic and inconsequential can interrupt concentration but can be quickly remedied minimising interruption. The relationship of trust built up in one-to-one lessons can be vital in spotting concerns that are important to the overall well-being of a student and preoccupation can sometimes be a symptom of a potential safeguarding issue (Department for Education, 2023). Duty of care goes beyond the voice studio and taking a moment to connect and enquire can be of vital importance to the life of student who may not have similar opportunities to seek support and guidance towards suitable professional interventions. Small attentions can increase relatedness between student and teacher which is motivating for both.

ASSIGNMENT 2

A Narrative Review of Literature

“If Intrinsic motivation exists, can it be used to improve learning outcomes in the voice studio and what factors enhance or reduce it?”

Introduction

The topic of motivation has been popular with educational researchers for decades (Asmus, 2021; Cerasoli, Nicklin, and Ford, 2014). A consensus of opinion has not been reached as to why some students achieve high levels of musical proficiency and professional status, whilst others give up after a short time. It may seem that some individuals are naturally studious, gifted or industrious in the pursuit of musical virtuosity (Lehmann, and Papousek, 2003). Talent alone, however, is not necessarily a predictor of success and as the phrase attributed to Thomas Eddison goes “Genius is 1 percent inspiration and 99 percent perspiration” (Sanborn, date unknown; Ziegler, 2014). It has been suggested that what separates the achievers from the avoiders is intrinsic motivation (Deci and Ryan, 2014).

Self Determination Theory (SDT) was the product of rigorous inductive and deductive exploration of intrinsic motivation by Deci and Ryan and was refined over decades (1985, 2002, 2014). It was a reaction against behaviourism and of theories concerning operant conditioning and was adapted to include need or goals as a driving force. SDT’s tenets are autonomy, competence and relatedness and it has formed the framework of countless experiments into motivation by other researchers. In reviewing relevant literature, the same themes that underpin SDT have been recurrent, therefore this paper has been structured accordingly with the themes of goals/need, autonomy, competence and relatedness forming separate sections. Deci and Ryan propose that individuals are intrinsically motivated towards feelings of autonomy, competence and relatedness, and are attracted by pursuits that are entertaining or interesting. Three factors influence intrinsic motivation; easily surmounted obstacles, defined targets and instantaneous assessment of progress (Tricomi and DePasque , 2016; Di Domenico and Ryan, 2017). The components of intrinsic motivation according to Deci and Ryan’s SDT (2014) will now be explored.

“Intrinsically motivated behaviors, which are performed out of interest and satisfy the innate psychological needs for competence and autonomy are the prototype of self-determined behavior”

(Ryan and Deci, 2000, p 65)

Autonomy

Fostering student autonomy has been an educational goal for many years (Bajrami, 2015) as it has been thought to enhance student learning and motivation (Holmes, 2021) and little evidence to the contrary has been discovered from research (Suggett, 2015).

Autonomously motivated students connect with the music, enjoy playing/singing, and continue their studies long term (Evans et al. 2013; King, 2016; Pitts et al. 2000, Comeau et al., 2019). College level music specialists self-reported that expression of emotion was an autonomous goal to which they strived (Lindstrom et al, 2003; Woody, 2021). Music students rated “enjoyment, social connection, expression, learner-directed/autonomy, creativity/experimentation, and identity”, as being important motivations (Woody, 2021, p1).

Musical experimentation gives students a greater sense of both autonomy and competence (Woody, 2021) linking back to SDT’s themes of competence, autonomy and relatedness (Deci and Ryan, 1985). An autonomy-supportive environment is one where the student’s perspective is central, where learning rationales and information are provided but where directives are minimal and language is non-judgmental and empathetic (Reeve, 2016).

Practitioners should provide structure and guidance, encouraging students to choose their own repertoire (Bonneville-Roussy, Hruska, and Trower, 2020) as personalised learning material, results in increased motivation to practice (Renwick and McPherson, 2002; Woody, 2021). Tailoring lessons to individuals by the inclusion of the student’s favoured music genre, can enhance their engagement (Evelein, 2006; Woody, 2021) and students often play through their favourite piece during their individual practise (Woody, 2021). Perhaps the familiarity with the material or the extent to which it has been perfected overtime, reinforces the learner’s sensation of competence and acts as an intrinsic motivation. Competence will be discussed later in this essay. Autonomous motivation affects the intensity of effort in the pursuit of a goal (Weinberg and Gould, 1995; Comeau et al., 2019) and self-imposed structure around practice routines, towards specific goals, was found to be motivating (Woody, 2021; Lehmann, Gruber and Kopiez, 2018). Stephenson (2018) conducted semi-structured interviews with four highly experienced and reputable voice teachers, chosen for their expertise and success (see appendix (ii)) The teachers agreed that student responsibility was a vital ingredient to successful learning, one asserting that if a student cannot be themselves and be open in the studio, then they will not connect with an

audience. Student autonomy fostered by pupil centred pedagogy was seen as an important motivation, with one of the interviewees stating that:

“It’s not my dreams for them that’s going to keep them going. It’s their dreams for themselves”.

Student autonomy can be supported by the practitioner providing choice, structure and rationale, whilst ensuring an empathetic, student-centred environment is maintained (Bonneville-Roussy, Hruska, and Trower (2020). Questioning, rather than instructing, fosters critical thinking and maintains student focus during lessons, resulting in student autonomy in the long term (Stephenson, 2018; Woodford, 1996). Autonomy was one of the conditions identified by SDT as vital for intrinsic motivation. Crocco and Meyer (2021) suggest that student attendance does not necessarily equate with intrinsic motivation, and that a skilled teacher is one that will ease a student towards autonomy, fostering their sense of self-efficacy and ensuring they achieve competence, a factor which will be examined later. Limiting autonomy extrinsically can act as a stressor reducing intrinsic motivation. A student whose parents live vicariously through their achievements, allowing them limited freedom, whilst applying psychological pressure (Gallagher and Coche, 1987; Howe, 1993; Freeman, 1985; Burland, 2005, American Psychological Association, 2018) may experience anxiety in fulfilling parental expectation, reduced enjoyment of the musical pursuit, and lack of intrinsic motivation (Freeman, 1991).

Dopamine and its role in autonomy and motivation

Dopamine is a chemical that transfers information between brain regions and its presence has been linked with seeking, urge or motivation (Gyurkovics et al., 2016). When curiosity was examined neurologically, increased dopamine levels were detected linking intrinsic motivation to dopamine activation (Kidd, and Hayden, 2015; Gruber, Gelman, Ranganath, 2014; Kang et al., 2009; Murayama et al., 2015). This makes sense as dopamine is connected with seeking and curiosity is a form of this; student curiosity and exploration have already been seen as intrinsically motivated (Deci and Ryan, 2000b). Greater brain activity is evidenced when an element of free choice is given in an activity, and dopamine activation is affected by autonomous conditions (Murayama et al. 2015). The effects of dopamine are: improved execution of tasks, improved ability in switching between various thought processes (mental agility), and a more fundamental understanding of intellectual concepts (Murayama et al., 2010). Therefore, when an individual acts autonomously out of curiosity, they are subject to the benefits of a dopamine rich environment in which learning is enhanced. Neural feed-back from viscera (intestines) was found to be present during

moments of autonomous engagement in a task: there was a 'gut feeling' perhaps linking to Hebb et al. (2005) and their findings regarding the intestinal hormone Cholecystokinin (CCK) and its effect on dopamine (Craig, 2009; Menon and Uddin, 2010; Menon, 2015; Murayama et al., 2015). Dopamine is implicated in motivation and the effects of dopamine are felt even at visceral level when an individual is autonomously engaged in a pursuit. Löwenstein, (1994) suggested that a knowledge deficit would stimulate an urge for discovery. It could be argued that some individuals are satisfied with incomplete knowledge and are therefore not motivated in a particular direction. Individuals may be more motivated in one area but not others. A complete lack of motivation would be symptomatic of depression which is linked to dopamine deficiency (Belujon and Grace, 2017). People with higher levels of neural plasticity seek to gain knowledge as a means of entertainment; they find studying engaging because their brains are developing (DeYoung, 2010, p.27; De Young, 2013, p.8; Di Domenico and Ryan, 2017). DeYoung (2013) linked dopamine to neuro-plasticity.

Researchers Hinnemann et al. (2020) observed music students in an autonomy supportive environment, which is student-centred as previously outlined (Reeve, 2016) noting that when the lessons were subsequently instructional (controlling), autonomy levels rose. This seemingly contradicts SDT, where external control is a stressor that limits intrinsic motivation, yet the researchers propose that results were in accordance with SDT whereby individuals adopt extrinsically regulated behaviours as their own (Deci and Ryan, 2000; Weinstein et al; 2013). The results were considered to be due to the effects of cognitive dissonance where individuals adapt their beliefs to match their actions (Harmon-Jones and Harmon-Jones, 2002; Harmon-Jones, Harmon-Jones and Levy, 2015). The participants adopted the external instructions as their own, maintaining their feelings of autonomy which Hinnemann et al. (2020) explain this using Festinger's "Theory of Social Comparison Processes" (1957) who suggested it was a natural human motivation to reduce cognitive dissonance. As a result of the study, the authors suggested that autonomy supportive environments are beneficial to learning but students must be prompted to execute an activity rather than simply have it explained, and that these external controls will not affect intrinsic motivation (Hinnemann, Hoier, and Dutke, 2020).

Competence

"Competence is the ability to integrate and apply contextually-appropriate knowledge, skills and psychosocial factors (e.g., beliefs, attributes, values and motivations) to consistently perform successfully within a specified domain" (Vitello, Grotorex and Shaw, 2021, p.4) To summarise, competence is the utilisation of skills to achieve a consistent and satisfactory outcome in a chosen pursuit. Regularity of practise is important to achieve competence and

when students realise that many hours of endeavour are needed to achieve competency, with expertise requiring yet more, their motivation often diminishes (Comeau et al., 2019; Comeau, et al., 2015; McPherson 2000). Stephenson (2018) asserts that a student's enthusiasm for the repertoire will motivate them to practise and without students' willing engagement in this process competence will not be achieved (Lehmann, 2018). Deci and Ryan's Cognitive Evaluation Theory (CET) (1985; 2000) assessed 'social contexts' that would foster intrinsic motivation and found that positive feedback and rewards, although extrinsic motivators, could imbue an individual with 'feelings of competence'. If the student felt that the feedback or rewards were undeserved they would be de-motivating. Without the external motivation and support of parents, young musicians will not discover the intrinsic motivation necessary to succeed, as intrinsic motivation requires a certain amount of initial competence to be effective (Burland, 2005; Deci and Ryan, 2014). It cannot be ascertained if 'deliberate practise' (Lehmann and Papousek, 2003; Ericsson, Krampe, and Tesch-Römer; 1993) alone can lead to highest levels of achievement, talent being an additional factor, however it was considered "necessary for invoking the cognitive, physiological, psychomotor adaptations" observed in successful performers (Lehmann and Papousek, 2003, p 458). Motivation can be seen in a willingness to practise, many hours of which are necessary to achieving the highest levels of success (Lehmann and Papousek, 2003).

Relatedness

"Relatedness refers to the desire to feel loved, connected to others, and meaningfully involved with the broader social world" (Tinsley and Tinsley, 2004, p1). In terms of music education, it can refer to the relationship between practitioner and student, student and peers (such as in a choir or band) or how a student identifies with a famous professional whom they wish to model themselves on. In isolated circumstances, where there is a loss of connection to a group, there can be a loss of relatedness and this can be de-motivating, for example musical prodigies who are isolated from peer groups during rigorous practice regimes, may become demotivated (Howe, 1993; Burland, 2005). Zhukof (2009) recommends that students perform to each other and that practitioners encourage musical discussions between them, additionally participation in extracurricular music ensembles, fosters motivation: "the desire to achieve recognition in these groups serves as a motivator" Zhukof (2009, p9). The author has concrete experience (Kolb, 1984) from college, of student singing anxiety, being alleviated when small discussion groups were implemented. Zhukof (2009) suggests that group participation develops autonomy, as students are less reliant on familial encouragement, and therefore two factors of intrinsic motivation are satisfied. Being with a peer group with similar interests, skills and motivations can act as a support system (Kingsbury, 1988; Burland, 2005) but after graduation, the lack of a musical cohort may be

keenly felt, and motivation may falter (Freeman, 1991; Burland, 2005). Bailey (2005) assessed the effects of group singing and performance and found that it improved self-concept of participants who felt intrinsically motivated to continue their participation and additionally felt motivated in other areas of their lives.

The relationship between student and practitioner is important and students value being treated as individuals and as having a life outside the studio (Freeman, 1991). A positive and at times almost therapeutic relationship with the teacher, develops student self-concept, leading to greater confidence and autonomy, which has already been found to be beneficial to motivation (Gaunt, 2004). Student/teacher rapport was considered to be an important motivator (Estepp, and Roberts, 2015; Carey and Grant, 2015) how the teacher communicates, for example their voice quality, directly affects the motivation of students; an enthusiastic tone employed by the practitioner positively influences how a subject was perceived (Paulmann and Weinstein, 2023, Cheng et al., 2022). What the teacher says can also influence motivation and if a teacher is too prescriptive there can be a resultant reduction in student motivation (Orzechowska and Polok, 2019). External controls can affect student/teacher relatedness and reputation of a teacher can have a motivational effect on their students. An oversubscribed eminent teacher may select their students, therefore by being in that teacher's learning cohort there is an element of kudos which may affect their intrinsic motivation (Burland, 2005). Burland did not, however, explore the possible negative effects on student self-concept if students were assigned to a teacher who was considered inept, less experienced or had a reputation for disinterest. Research exists to suggest that the image of the teacher affects the educational outcome of the students which possibly, is the result of reduced motivation (Malo and Akila, 2013)

Goals

According to Deci and Ryan (2000b) intrinsic goals are autonomously pursued and positively affect wellbeing. Intrinsic goals involve curiosity, interest, competency and mastery, for example, getting to the next level in a computer game or mastering a favourite guitar riff. Conversely extrinsic goals, such as taking a music exam to gain UCAS points can create stress and are less likely to be successful, unless students adopt the goal as their own (OIT) (Reeve, 2016). Deci and Ryan (2000b) propose that goals are not created by perceived needs deficit but by curiosity, interest and desire for mastery. Valerio (2012) states that goal setting in the class room is beneficial because some students may struggle to stay on track or finish tasks unless there are clear achievement parameters. Additionally, targets are consistent reminders of progress towards a learning objective and are markers of success when they have been reached (Tan and Sin, 2020; Suzuki, 2020; Hutchins, 2021). The

achievement of small but regular goals further stimulates intrinsic motivation (Sternberg and Williams, 2002, p. 361; López-Íñiguez and McPherson, 2020; Suzuki, 2020). The use of sticker charts to map the progress of younger learners has been seen as motivating (CIOMIT Team, 2022; Reiss, 2013) and rewards for regular practise was important and motivating for child musicians in the early years of their studies (Ericsson et al. 1990; Burland, 2005). 'Gamification' (using tactics found in gaming e.g., leader-board, points and badges) can provide a framework where students work towards regular goals (Suk, 2023; Buckley and Doyle, 2016; CIOMIT Team, 2022). If behaviours are rewarded through gamification that do not meet the criteria of autonomy, relatedness and competency, however, they will be subject to overjustification theory, and hence be de-motivational (Asaj et al., 2012; Deci and Ryan, 1984; Pretty, and Seligman, 1984) therefore student participation in game strategies should be voluntary and should reward effort.

Students must set appropriate goals as, if challenges are too great, this can be de-motivating (Suzuki, 2020) and practitioner guidance is beneficial. Likewise, if goals are negligible the student's sense of achievement is mitigated (Sternberg and Williams, 2002). The expert singing teachers in Stephenson's study (2018) helped their students set appropriate goals and said that in their experience, students had rarely been encouraged to set their own goals, prior to their meeting. They also used continual assessment, commenting moment to moment on student efforts in lessons. Formal assessments, such as performances, were also utilised to gauge progress, and students were encouraged to self-assess (Stephenson, 2018). When students stated their goals, this correlated to the amount of practise they achieved; students that practised least, eventually ceased their studies (Lehmann and Papousek, 2003).

Student musicians who attribute success to talent, work less consistently towards goals and cope less well with failures (O'Neil and McPherson, 2004; Burland 2005). This is in line with the hypothesis that some individuals have a growth mentality, believing that intelligence (or talent) is developed over time, and others that intelligence is innate and fixed (Elliott and Dweck, 1988; Burland, 2005). Their research found that students with growth mentality pursued self-development for its own sake but believers of finite intelligence, sought external acceptance through performance goals. Practitioners should, therefore discuss and challenge students' views regarding talent. Students with a growth mindset may tend towards intrinsic motivation so all students should be acquainted with Eddison's comment that genius is largely a construct of hard work (Sanborn, date unknown; Ziegler, 2014). Students motivated by performance goals are less likely to have the necessary resilience to become professional musicians, yet students motivated by their joy of learning will be more

likely to have successful performing careers (Burland, 2005). Highly goal orientated students will persevere in a task described as difficult but will not aspire to tasks where they have previously failed. A need to achieve is balanced against a need to preserve self-concept by avoidance of failure (Weiner, 1992; Burland, 2005 p24). In the context of music education, performances can be seen as the ultimate endpoint or goal yet performance goals can have a positive or negative effect on motivation depending on outcome; a self-perceived performance success will result in more intrinsic motivation to perform again, whereas a perceived failure results in reduced intrinsic motivation (Woody, 2021). Students who are motivated by the avoidance of failure in performance, have reduced motivation and do not reach their goals (Lacaille, Koestner, and Gaudreau, 2007) and the desire to perform less badly than other students was not motivating and produced fewer achievements (Darnon, et. al., 2007). An imminent performance was a strong motivator to practise and successful performances were linked to practise by the students, rather than luck (Lacaille, Koestner, and Gaudreau, 2007). Students whose motivation was to impress others rather than to communicate with the audience (extrinsically motivated), were more likely to cease studies after a perceived bad performance (Lacaille et al., 2007, p. 253). A wish to communicate with an audience (relatedness) would be intrinsically motivated.

Individuals have an inherent need to affect change so if an activity is considered pointless and has no perceived goal, participation will be less enjoyable (McNaughton and Gray, 2000; Di Domenico and Ryan, 2017). Therefore, if there are no goals for a student to aspire to in the context of voice lessons then there will be no motivation to practise or to continue to study. If there is an external motivator, causality will be shifted away from the individual, therefore if a practitioner sets goals, then the student will experience reduced autonomy and will be de-motivated. Intrinsic motivation is more beneficial to wellbeing than extrinsic motivation, although extrinsic motivation may be indirectly influential (Bradshaw, 2020; Ryan and Deci, 2017). A student working towards a self-set performance goal would be an example of this. Lekes (2011) found that adolescents who pursued intrinsically motivated life goals, had a greater sense of well-being.

Summary

Motivational antagonists

When intrinsic motivation dwindles or is exhausted then studies and pursuits are ceased; there is no longer the desire or will to participate. Reduced autonomy, competence and relatedness can all be contributory factors, however reasons for ceasing music education are not necessarily due to diminishing intrinsic motivation but can be externally motivated by the opinions, perceptions and pressures of others. Issues that led to students disregarding

music as an educational option, were that music was not as highly regarded as sport within schools, and that parents shared this opinion (Freer and Evans, 2019). A study by Walters et al. (2014) found 42.7% of participants chose PE as an option (elective) and only 4.8% chose music. Music was rated as extremely important to adolescents (Evans and McPherson, 2017; Freer and Evans, 2019) yet students' feelings and musical preferences were disregarded by teachers as not relevant which affected the students' sense of belonging (relatedness). Additionally, learning rationales were not included in lessons, and students felt, or were led to believe, that music would not be as useful in their lives after leaving school, as sport (McPherson et al. 2015; Freer and Evans, 2019). It was generally perceived amongst the students that only elite musical performers were valued and they themselves, lacked the competence to study the subject, hence a lack of relatedness (Lamont and Maton 2008; Freer and Evans, 2019). The reasons students gave for ceasing their music studies included dwindling practise, which led to reduced competence, and loss of relatedness, after attendance of regular musical activities was discontinued (Evans, McPherson and Davidson, 2013). Quantity of practise was directly linked to achievement and students that practiced the least eventually gave up (Lehmann and Papousek, 2003). The main reasons invoked for discontinuing music lessons included lack of practice, preferring other instruments, and loss of interest (King, 2016). If intrinsic motivation can be fostered by autonomous learning environments then students will practise, leading to competence and further motivation.

Many adults remember participating in music lessons as children yet ceased their studies in adolescence, a time when interest in music seems to peak (Ruth and Müllensiefen, 2021; North, Hargreaves and O'Neill, 2000). Music practise is perhaps not prioritised over academic study, sporting or social activities, and dwindles. This leads to decreasing competence and finally, the student no longer identifies themselves as a musician; there is a lack of relatedness. Adolescent girls reported a drop in motivation, whilst boys of the same age, especially guitarists, stated that learning goals had been achieved (Ruth and Müllensiefen, 2021). Possibly a rise in the priority of relationships was a factor for the girls whereas guitarists had perhaps indeed reached a level of competence where they could play their favourite songs adequately. In line with SDT, with the loss of competence and relatedness, intrinsic motivation too is lost, yet continued participation of group activities stimulates motivation (Ruth and Müllensiefen, 2021).

External motivation

External motivation constitutes any influence or factor extrinsic to the learner that affects their motivational state (Deci and Ryan, 2000). Parents are external motivators to student

singers and musicians, but contrary to the theory that external forces impinge intrinsic motivation (SDT, 1985, 2000), evidence exists that parents are facilitators. External motivation from parents was found to be influential in the lives of child musicians, who not only relied upon parents to pay fees, but to transport them to lessons and rehearsals (Bloom, 1985; Freeman, 1985). Consistent encouragement, the provision of suitable practise space and the seeking of performance and listening opportunities were also provided by parents (Burland, 2005). Students who were children of professional musicians did not excel to the same extent as children who were the sole musical member of the family, where they were considered to be special by the parents (Sloboda and Howe, 1991). Enthusiastic and supportive parental attitude was more beneficial to young musicians' development than a dictatorial one (Freeman, 1991) linking to practitioners who modelled desirable behaviours (Metcalf and Game, 2006). Family dynamics changed to support the growing needs of the developing musician; more time was spent listening to music and accommodations in family schedules were made to allow for increased practise time (Sloboda et al., 1996; Sosniak, 1987).

Unlike American parents, Chinese parents sat in on music lessons, and Chinese students practiced twice as much as American students, wanting to please parents and teachers, but also wanting to achieve proficiency for its own sake (Comeau, Huta, and Liu, 2015). The drive towards musical and academic achievement may be culturally motivated, if the student comes from a culture where academic and artistic achievement are valued (Zimbardo and Webber, 1994). Early commencement of studies (before the age of 7), and parental involvement lead to high student motivation and achievement (Comeau, Huta, and Liu, 2015). Parents are motivated by the belief that the pursuance of musical activities would be character building and might lead to improved academic performance (Dai and Schader, 2001). It is not the activity in itself, but core values that the educational process provides that are their primary motivation (Dai and Schader, 2001). Attitudes toward music education in western countries appears to differ from countries such as China, where music is valued as highly as academic subjects, and parents take an active role in the musical education of their children (Comeau, Huta, and Liu, 2015). In collectivist cultures such as China, the successes of others are not viewed as demotivating, but are viewed instead as aspirational (Yang et al. (2023). This might be why Chinese children are not affected in the same way as western children, by external factors (Burland, 2005). They do not experience shame by negative comparisons with others and want to achieve because they feel a social responsibility towards their parents, teachers and peers (Neumann, et al., 2009). Internal and external motivation combined to produce high achievement in young Australian musicians, however, where motivations were exclusively external there were poor

achievement scores (Renwick and McPherson, 2009). Externally motivated goals such as the pursuit of wealth or fame negatively impact wellbeing amongst adolescents, whereas intrinsically motivated goals such as personal development lead, to improved wellbeing (Kasser and Ryan, 2001).

Conclusion

As a result of this review, the author believes intrinsic motivation to exist and that it can increase student engagement when directed towards, and reinforced by goals. Autonomy, competence and relatedness have been recurrent themes in this review of literature and are constituents of intrinsic motivation according to SDT (Ryan and Deci, 1985, 2000, 2017). An environment that fosters intrinsic motivation is autonomy supportive allowing students freedom and fostering competence whilst creating strong bonds between practitioner, student and learning cohort (Reeve, 2016). Music teachers who fail to foster autonomy in their students, adhering instead to a prescriptive approach, may do little to stop the spark of intrinsic motivation being extinguished (Conti, Amabile, 2011) and when it is gone, students cease their studies. Sport is currently considered more important than music culturally in the west (Freer, and Evans, 2019), despite research that music tuition improves academic results (Baker, Hallam and Rogers, 2023; Brown, 2012; The Royal Conservatory of Music, 2014), and wellbeing (Bonneville-Roussy, Hruska, and Trower, 2020). Music practitioners must endeavour to reverse this trend by creating an atmosphere where students are enthused by autonomous learning (Hinnemann, Hoier, and Dutke, 2020) and where structure is provided by self-set goals (Hutchins, 2021; Beal, 2017) and teacher guidance (Orzechowska, and Polok, 2019). Regular practise should be noticed and rewarded (Ericsson et.al., 1990; 1993) and students should be valued as individuals (Freeman, 1991; Burland, 2005) for both their competence and effort.

Recommendations

In the voice studio, care must be taken in choosing material so that repertoire offers sufficient challenges to students. Incremental progress must be evidenced, yet material should not be totally beyond student competence (Patall, Sylvester, and Han, 2014; Gray and McNaughton, 2000). The utilisation of student initiative in finding material, could be motivating as it fosters autonomy (Stephenson, 2018; Crocco and Meyer, 2021; Woody, 2021). If students select material that is too difficult it will prove de-motivating, equally, if a song is too rudimentary then students may tire of it quickly, therefore some teacher control is beneficial (Orzechowska, and Polok, 2019). By suggesting a range of material, some affording rapid mastery and others that are more challenging, a consistency of intrinsic motivation might be achieved. Customising lessons to suit the learner is also recommended

to create a sense of relatedness, and autonomy (Carey, G., and Grant, C., 2015). Intrinsic motivation was found to be enhanced by affirmation and options, whereas deadlines and unhelpful and excessive criticism diminished its effect (Woody, 2021; Burland, 2005). Therefore, feedback regarding results, delivered in a friendly, non-judgmental manner will be beneficial, as will providing a range of learning materials, and agreeing goals that have flexible deadlines or that can be reviewed in light of progress will all be motivating factors. Substituting questions instead of instructions (Crocco and Meyer, 2021) and providing learning rationales might create an autonomy supportive environment (Reeve, 2016) enhancing motivation (Deci and Ryan, 2014). Providing explanations for exercises and contextualising them during lessons may be helpful and motivate students to practise them (West, 1994). Students experiencing anxiety concerning vocal studies, could be encouraged to talk to their peers (Zhukof, 2009) to compare thoughts and feelings on the subject, fostering relatedness (Ryan and Deci, 1985), and informal group singing could be encouraged, normalising the activity and reducing anxiety, concerning singing in public (Palmer, 2007; Zhukof, 2009). Additionally, group singing may prove therapeutic and motivating in itself, providing a sense of connectedness to students (Bailey, 2005). Parents and teachers are notable influencers of student motivation (Guay, Ratelle, and Chanal, 2008) without whom talent is unlikely to be brought to fruition (Lehmann AC, Kristensen, 2014).

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Appendix A

Questions posed by Stephenson (2018)

Describe your rapport with your students

What does rapport look like in the studio?

How do you work with your students on self-motivation?

Is self-motivation something students bring with them or something that you must instil within them?

What does that look like?

Do you work with your students on goal setting or do they come to you with their goals?

What is the place for critical thinking in the vocal studio?

Which is the most important studio work: rapport, motivation, critical thinking, addressing musical issues, or goal setting?

How do you assess students?

How do you stay current in the field?

Which attributes do you feel contribute to new voice instructors?

What do you suggest for the training of applied teachers to develop desirable traits?

Appendix B

Teacher interviewees in Stephenson (2018)

National Association of Teachers of Singing (NATS)

Linda Poetschke: Co-founder of the Taos Opera Institute and teacher at University of Texas

Jeanne Goffi-Funn: Vice president of New York City NATS and member of Opera America

Gary Mabry: Past president of Texas chapter of NATS singing teacher at UTSA

Josephine Mongiardo: NYTSA board member, board member of Oren Brown Professional Development Program

Appendix C

<https://ciomit.com/how-to-motivate-your-child-to-practice-their-instrument/>

CIOMIT Team (2022), How to motivate your child to practise their instrument

Colorado Institute of Musical Instrument Technology

1. Gamification
2. Sticker chart
3. Exposure to music
4. Student repertoire choice
5. Link practise to a favoured pastime which can be enjoyed afterwards
6. Performance goals