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Choice and Motivation in the Art Classroom

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Abstract

This research focuses on the effects of autonomy on motivation and year 7's perspectives on choice-based art projects. It explores the implications and possible contradictions of autonomy in the context of a diverse, 'requiring-improvement' school in East Anglia. Data from questionnaires, interviews and participant observation revealed that a choice-based project had a positive impact on students' attitudes towards materials, outcomes, teacher exemplars, perceptions of competence, general interest and external recognition. Implications for future research and classroom practice are also discussed.

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Introduction

The annual educational report of 13/14 concluded that improvement in secondary schools had stalled in comparison to that of primary schools (Ofsted, 2014). In "Key Stage 3: The wasted years?" (2015), Ofsted provides evidence of a worrying lack of challenge in KS3, and repetition of learning content in the transition from KS2 to KS3. From interviews with leadership, the report ascertained that schools were focusing primarily on KS4 performance and that KS3 was not a priority. Ofsted argued that it is imperative for teachers to cognitively challenge KS3 students, quoting the headmaster of a good practice school who had stated "if you get year 6 to year 10 right, then year 11 looks after itself" (Ofsted, 2015, p.14).

The study makes no reference to art and design, but there is no reason why we should not acknowledge Ofsted's observations and consider how we can challenge KS3 students more. In my recent secondary school positions, working in a private boarding school, an 'outstanding' village college and a 'requires improvement' city school, I have been surprised by the difference in intellectual demand between KS3 and KS4. The latter requires students to develop independent practice and personal ideas. In contrast, at KS3 there appears to be little room for meaningful choice or control. Schools focus primarily on technical skills and evaluation rather than the development of conceptual work or self-driven practice.

Research shows that people are more creative when they are motivated by their personal drive rather than by external factors (Amabile, 1983; Deci & Ryan, 1985a) and through a series of questionnaires conducted in primary schools, Cohen and Oden (1974) discovered that most teachers highlighted the importance of autonomy when describing creativity. Independence and self-determination are not areas we are focusing on at KS3. Nonetheless, by the end of this stage, we expect students to make curricular choices that will determine the careers they can pursue. My question is, should we be challenging KS3 students more by developing motivation, autonomy and personal choices, rather than practical skills?

Some schools are starting to offer year 9 students the opportunity to do a KS4 style project whereby the students are given a title and allowed to develop a personal project. In conversation with the current head of department at my placement school, it became clear that this strategy intends to give students a more realistic idea of what GCSE level work is like, and to incite students to take the subject in KS4. Whilst this is to be applauded, I wonder why it is limited to year 9 and whether other KS3 years might benefit from a similar approach.

Within this paper, therefore, I intend to address three main questions:

RQ1 - What opportunities for choice are there in the art classroom?

RQ2 - Is there a link between choice and motivation?

RQ3 - What are students' perspectives on the matter?

My hypothesis is that due to different kinds of motivations, year 7 students will respond to a choice-based project in different ways. However, I believe the perception of ownership and perceived choice will have an overall positive effect on students' attitudes to learning. In the next section of this paper I will review the literature of motivation, focusing particularly on self-determination theory.

Literature review

Motivation

Although motivation can be understood simply as the drive to do something, when it comes to educational research it is far more complex than that. There are many theories and perspectives that explore the causes, behaviours, expectations or aims that affect motivation (Anderman & Anderman, 2010). However, there are two concepts that are common to all theories; intrinsic and extrinsic motivation.

Extrinsic motivation refers to the expectation of a reward or avoidance of punishment. Intrinsic motivation refers to the willingness to engage that comes from inherent satisfaction without regard for the consequences (Ryan & Deci, 2000, p.56). Deci and Ryan also introduced the concept of amotivation, which refers to individuals who lack personal control and are unable to self-regulate (Deci & Ryan, 1985a, p.150).

Initial research sought to strictly classify individuals' behaviour as being autonomy orientated (intrinsic motivation), control orientated (external motivation) or impersonally orientated (amotivated) (Deci & Ryan, 1985b). In addition, studies indicated that when external motivators such as rewards, threats, deadlines or competition preceded tasks, they had a negative impact on intrinsic motivation (Amabile, DeJong & Lepper, 1976; Deci & Ryan, 1985a; Ryan & Deci, 2000, p.59). More recently there has been a shift towards a more flexible perspective where it is accepted that intrinsic and extrinsic motivation can coexist (Ryan & Deci, 2000; Lepper, Iyengar & Henderlong, 2005).

Choice

Self-determination

Self-determination theory (SDT) is a theoretical perspective that focuses on the study of factors that enhance or undermine intrinsic motivation (Ryan & Deci, 2000). This perspective is based on the belief that competence, relatedness and autonomy are the basis for maintaining intrinsic motivation. Competence refers to one's belief in the ability to perform; relatedness is concerned with how individuals link tasks to a wider social context; and autonomy refers to an individual's perception of control over their choices (Anderman & Anderman, 2010, p.119). In order to facilitate an environment that enhances self-determination, the conditions in schools need to satisfy those three needs (Ryan & Deci, 2000). This study focuses primarily on learner autonomy due to its relevance to my teaching context. However, it also provides students with the opportunity to develop their sense of competence through formative and summative feedback. There are also opportunities for students to link their work with the social context through the procedural choices they make during the project. Both students' perception of competence and relatedness will also be touched on in the questionnaire.

Autonomy

In some literature, autonomy is also referred to as self-determination (Deci & Ryan, 1994; Nix, Reeve & Hamm, 2003). This concept can be subdivided into three components: volition, locus of control and perceived choice. Volition refers to the feeling of freedom to do something; perceived

locus refers to the individual's perception of control over their actions; whilst perceived choice refers to the opportunity to decide on one's actions (Nix et al., 2003; Beymer & Thomson, 2015).

Over the years, researchers have shown that the opportunity to make meaningful choices in primary, early secondary and undergraduate contexts increases intrinsic motivation (Deci, Schwartz, Sheinman & Ryan, 1981; Deci & Ryan, 1985a, p.154; Moller, Deci & Ryan, 2006). In addition, there has been evidence that these types of choices can lead to greater willingness to return to tasks in the future (Zuckerman, Porac, Lathin, Smith & Deci, 1978) and more creativity (Cohen & Oden, 1974).

In 2003, however, Nix et al. found evidence that choice does not have as much influence on autonomy and self-determination as traditional literature presumed. Through a sequence of three laboratory studies with undergraduate students and a unified model for measuring all three components, they found that while locus on control and volition invariably had an effect on intrinsic motivation, choice did not. This is particularly interesting because the experiments of other researchers had found that choice did, indeed, matter (Zuckerman et al., 1978). These experiments consisted of yoked pairs of undergraduate students; one of them had a series of choices over how and for how long to work on a puzzle, whilst the other had to comply with these choices. The researchers measured motivation in two ways; firstly, through observing the kind of activity students engaged in after the test, and secondly, through a self-report questionnaire. The results from the experiment suggested that there was a link between choice and intrinsic motivation. The divergence in the findings between Zuckerman et al. and Nix and his colleagues suggests that we need to investigate choice further in order to assert if it is definitely a component of intrinsic motivation or a concept that influences positive attitudes independently.

Types of choices

In "*Classroom motivation*" Anderman and Anderman (2010) outline different ways through which teachers can encourage student-led choices in class. On the one hand, there are logistical tasks, such as daily routines, classroom rules or where to complete work. On the other, we have choice of academic tasks. Within the latter, they suggest two strategies: we can incite choice within the task by offering different ways of achieving the same goal (with teacher support), or we can incite between-tasks choice, which refers to choosing the topics to explore. Research points us in different directions with regard to how those choices lead to intrinsic motivation.

Mozgalina (2015) conducted a study on undergraduate Russian language learners where she differentiated between content and procedure choices. These can be compared to between and within-task choices. In the first study she offered each subgroup no choice, limited choice or free choice over which Russian celebrity to study. Immediately after, she gave the participants some questions to complete in response to their topic. The second study had the same starter, but the second tasks did not provide the participants with any guidelines. The results showed that the topic choice alone did not produce any effect on students' motivation. This might have been a consequence of the task being inherently interesting (Moller et al., 2006). However, students with limited choice or no choice responded positively to procedural choices, whilst those with free choice responded negatively.

This negative result can be explained through the concept of ego-depletion (Baumeister, Bratlavsky, Muraven & Tice, 1998). This concept suggests that there is a threshold at which choice becomes too much. Excessive meaningful decision-making can cause a state of fatigue that affects subsequent activities (Moller et al., 2006; Beymer & Thomson, 2015). Two or four choices seem to be a sensible proportion, and is better than no choice or too many (Mozgalina, 2015).

Deci & Ryan (1985a, 2000) have been the main protagonists of intrinsic motivation research over the last thirty years. However, Nix (2003) and his colleagues have critiqued the ambiguity and inconsistency of studies when it comes to measuring autonomy. They argue that so far, autonomy had always been measured as a whole, but no one had broken it down into its smaller components (volition, locus of control and perceived choice). In response, they attempted to design a unilateral measure for all components of autonomy (2003). In 2003 they applied this measure to a succession of three studies in a laboratory setting with undergraduate students. The first study tested if an autonomy-supportive environment raised intrinsic motivation. The second study, differentiated between the effects of option choices (what to do) and action choices (how to do it) on intrinsic motivation. Finally, the third study focused on the effect of being exposed to a sequence of meaningful choices instead of occasional choices.

Through their first study they confirmed that autonomy-supportive environments have a positive effect on intrinsic motivation. Through the second study, they found evidence that option choices failed to have an impact on intrinsic motivation per se. However, their measuring test did not account for the distinction between option and action choices, and did not provide useful data on the

specific effect of action choices. More research is needed to identify whether action choices are more successful in influencing intrinsic motivation. Finally, their third study identified that, in order to affect intrinsic motivation, there needs to be a sequence of choices. These results are supported by the studies of Parker and Lepper (1992) and Cordova and Lepper (1996). In the first, students were only provided with a single choice and the study failed to show an influence on motivation. In the second, students were given a sequence of choice regarding options, work, methods, pace, personal references and effort. This proved to be beneficial to their motivation and also their competence and aspirations.

From these studies we can see that on one level we have some choices which have been referred as content choices (Mozgalina, 2015), between-tasks choices (Anderman & Anderman, 2010), or option choices (Nix et al., 2003). On the other hand we have procedural choices (Mozgalina, 2015), within tasks (Anderman & Anderman, 2010) and action choices (Nix et al., 2003). It has not been proved that the former have a direct effect on intrinsic motivation, although they could still have a positive effect on students' attitudes to learning. The latter, however, have been shown to have an effect on intrinsic motivation as long as they are presented regularly and students feel they have freedom and control to choose.

Are there external factors?

As we have seen so far, there are many variables that affect choice in an educational setting depending on how that choice is provided. In addition, there are also certain external factors that must be taken into consideration in the choice conundrum, for example age, gender, ethnicity and peer influence. Not all of these have been researched in the same depth, but I will briefly summarise how they can have an impact on student choice.

There is evidence that intrinsic motivation decreases when students reach secondary school (Lepper et al., 2005). This is surprising given that developmental research suggests that children are more able to evaluate choices as they move towards adolescence (Midgley & Feldlaufer, 1987, p.238; Jacobs & Klaczynski, 2002, p.147). It appears that this is the result of the tighter control, lack of relatedness and reduced autonomy that characterise some secondary schools (Anderman & Maehr, 1994). Midgley & Feldlaufer (1987) studied a significant amount of teacher and student perceptions towards choice in the transition from primary to secondary school. The results show that both parties believed there were fewer opportunities for choice in secondary school. The researchers

argue that this was due to teachers having less trust in students, but it could also be a reflection of the organisational and logistical differences between primary and secondary.

It is beyond the possibilities of this paper to fully explore gender in the art classroom, but I will highlight two findings with regards to stereotypes and attitudes in secondary classrooms. Firstly, literature suggests that students are subject to gender stereotypes from the age of three (Kuhn, Nash & Brucken, 1978; Anderman & Anderman, 2010, p.120) and both gender stereotypes and peer pressures can affect students' choices in a project. Secondly, research suggests that in some classroom contexts females feel uncomfortable and participate less (Orestien, 1994). In a classroom environment where male students are judgmental and competitive, girls can be deterred from taking the risk of giving the wrong answer.

Through a meta-analysis of 41 studies, Patall and her colleagues found evidence that culture was a determinant factor on student choices (Patall, Cooper & Robinson, 2008, p.274). They identified that in individualistic cultures such as in United States, personal agency and independence are valued in establishing one's self-concept. In contrast, some Asian cultures, which are more collectivistic, gave less importance to these concepts. From these studies the authors highlight that Asian Americans' intrinsic motivation increased when there was a trusted authority figure or other students made the choice for them, and for those Chinese students with a close relationship with their mothers, there was no benefit in giving them personal choices (ibid.).

It is generally understood that many students conform to peer pressures and expectations, and there is a natural desire to be accepted which can lead to a reluctance to take risks or challenge oneself (Anderman & Anderman, 2010; Beymer & Thomson, 2015). Mozgalina (2015) concurs that in her study, peer pressures might have influenced students. Those students who had free choices might have felt that they had to come up with something original, while those who had no choice would not. These external factors might have had an effect on their intrinsic motivation.

Summary

Research has shown that students can be intrinsically and/or extrinsically motivated. Whilst teachers need to be aware of this, it is important to acknowledge that each student, and therefore each classroom, is different.

Self-determination theory focuses on the study of intrinsic motivation and identifies three basic needs to be addressed in order for students to engage: autonomy, competence and relatedness. Autonomy has been thoroughly studied and is composed of three subcategories: locus of control, volition and choice. However, it is not clear whether all those elements have an equal effect on motivation. The literature identifies different types of choice and argues that not all of them have a positive impact on intrinsic motivation. In order for choice to lead to autonomous behaviour, it needs to possess a sense of freedom. It also needs to be procedural and sequential. Finally, there are external factors that need to be considered when assessing effects on intrinsic motivation such as age, gender, ethnicity, and peer pressure.

Through this literature review, it is has become evident that there is a clear relationship between certain types of choices and motivation. However, there are limitations depending on how choice is provided and it has been proved that not all types of choices have a positive impact on intrinsic motivation. In the next section I will address the opportunities for choice in the art classroom and explore students' self-reported perceptions to ascertain if and how my classroom practice supports these theories. Ethical considerations, methodology and research methods are also presented.

Ethical Considerations

Throughout this research I ensured that it conformed at all times to the ethics guidelines laid out by the British Association of Educational Research (2011) and Cohen, Manion & Morrison (2007, pp.51-77). In order to ensure all consent was informed, a letter was sent to parents / guardians explaining the content of my research and giving them the option to withdraw their children from being interviewed. In addition, the objectives of this research were shared with students. They were made aware that from the results of this research we would be able to identify their learning styles and preferences. However, in order to apply that information to the design of future schemes of work, we required an honest response to the questionnaire.

As an educator I am responsible for the wellbeing of all my students. My research respected students' cognitive development by choosing to conduct a limited autonomy project as a progression from the prescribed project. The research benefited the students' self-driven practice and helped to develop their ability to problem solve independently. This was illustrated through the type of questions students asked as the project developed. While at the start of the choice-based

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project they were asking for verification, by the end of it they were only asking for clarification regarding logistical issues, such as where to find materials.

No names of individuals are used anywhere in this paper to protect privacy. This was clearly communicated to the students, parents/guardians, teachers and the headteacher of the school in which the research was conducted.

Methodology and Research Methods

The purpose of this research is to investigate whether choice-based projects can increase year 7's intrinsic motivation and allow us to teach them in a more autonomy-supportive way. It also explores opportunities for choice in the art classroom and aims to acquire a deeper understanding of students' perspectives on the matter. Given the limited number of art lessons that students have in schools, a longitudinal case study was considered to be the most appropriate method for the research. This method is based on an in-depth examination of a single case in a small percentage of the population. Wilson (2009, p.205) argues that it is difficult to make any generalisations from case studies. In order to increase validity, therefore, I triangulated my research by obtaining qualitative and quantitative data through participant observation, questionnaires and interviews.

Study group overview

The participants in the research were two year 7 classes, organised in mixed ability sets and who have art lessons once a week. Both classes have had the same art teacher throughout the year. There was a broad range of cultural and socio-economic backgrounds and some students had poor attendance. The final number of students was 35. Of these, 20 were female, 15 were male, 12 had English as an Additional Language (EAL), nine had moderate learning difficulties, and seven were eligible for Pupil Premium (PP), a funding initiative which is aimed at narrowing the attainment gap for disadvantaged students. Students who did not attend all lessons were excluded from the results.

Research design

Opportunities for choice in the art classroom

Nix et al.'s study (2003) argued for further classroom research and proposed a model where teachers asked students what they want to do, how they want to do, and how it will be assessed. However, practising teachers need to comply with school policies and regulations. In order to decide which level of choice I should give students for this research, I produced a table (Table 1 below) that analyses the spectrum of choice that students can be given in a project in line with the National Curriculum (NC). These include: artists, which refers to history of art and contextual studies; media, which refers to materials and techniques; and outcome, which refers to the final product of the project.

Model one was disregarded as it could have led students to a state of ego-depletion and it would have not been ethical for the students' cognitive development to force them into being fully autonomous without having first established some routines. Model two and three were omitted because the school has a scheme of work that needs to be followed and students do not have full autonomy on which topic to choose. In addition, these models narrow down autonomy as students' progress through the project, which defeats the point of increasing their autonomy. Model four was ruled out because the class teacher did not consider the class to be prepared to take full ownership of material experimentation at that particular stage of the academic year. This could have also led to a state of ego-depletion when producing the final piece. Model six was also disregarded because it did not offer sequential choices. It initially offers some freedom, but then takes it away and does not allow students to apply their learning.

In my opinion, model seven would be the most appropriate model to allow students to develop intrinsic motivation. Students can explore themes that are personal to them, teachers can support them when it comes to materialising those ideas, and students are then set free to consolidate their learning in a personal final piece. However, my school context meant that I was unable to offer students a choice of topic. Consequently, I chose model five. This model complied with the school and national curriculum objectives while gradually developing autonomous behaviour. Finally, model eight was already being used in this classroom and it was applied for first sequence of lessons in this research.

Opportunities for choice: models		
Full autonomy-supportive environment Unprescribed	1) Choice of Artist/Topic /Style Choice of Media Choice of Outcome	Some literature supports this model and claims that it complies with the NC as well as with the rationales for teaching art in schools (Douglas & Jaquith, 2009). However, other research suggests that higher ability students tend to be more able at restructuring their learning than low achievers (Zimmerman & Martinez-Pons 1986). This raises the question of whether the model caters for the differential needs of secondary school. In addition, it requires very established routines that may not be so easy to maintain in a student's path through education.
Limited autonomy	2) Choice Artist / Topic / Style Choice Media Set Outcome	This model allows students to explore their personal interests and make connections. Autonomy is narrowed down as the project materialises into a final piece.
	3) Choice Artist / Topic / Style Set Media Set Outcome	This model allows students to explore their personal interests and make connections. It narrows down autonomy when ideas take form.
	4) Set Artist / Topic / Style Choice Media Choice Outcome	This model does not encourage students to acknowledge their personal interest or make connections explicitly. The project increases autonomy when ideas take form.
	5) Set Artist / Topic / Style Set Media Choice Outcome	This model does not encourage students to acknowledge their personal interests or make connections explicitly. Students have limited materials and only reach action choices when the project materialises into a final piece
	6) Set Artist / Topic / Style Choice Media Set Outcome	This model allows students to explore their personal interests and make connections. Students have the chance to explore materials, but this autonomy is interrupted when the project materialises into a final piece.
	7) Choice Artist / Topic / Style Set Media Choice Outcome	This model allows students to explore their personal interests and make connections. This autonomy is interrupted when it comes to exploring materials, but is regained when the project materialises into a final piece
No autonomy (Prescribed)	8) Set Artist / Topic / Style Set Media Set Outcome	This model only offers circumstantial choice to students. For example: being told what to draw, what to use and how it needs to look at the end.

Table 1: Different models for opportunities for choice

Timeframe

The research was conducted over seven consecutive one-hour lessons. During the first three I was a participant observer of a prescribed project delivered by the classroom teacher. This part of the project focused on practical skills such as collage, transferring an image using tracing paper, and oil pastels. In addition, students had to complete a worksheet as homework where there were multiple-choice questions about cubism. After these three lessons students completed the initial questionnaire.

The last four lessons were delivered by me and offered students a limited number of choices for their final piece. They started with limited option choices such as using personal colours and compositions. This gradually built up to choosing a personal object and deciding whether to develop a two dimensional or three-dimensional final piece. Over this period, students had time to try both options, assess their competence, improve the work, and finally make a choice. Students had some freedom over which materials to use. A selection of materials was provided, but the teachers supported students who wanted to be more inventive. In addition, students had to complete a mood board as part of their homework. They had to find a cubist sculptor, a sculpture, choose three colours they liked and find photographs of, or create, three interesting textures. After these four lessons students completed the final questionnaire.

Overview of data collection

The numerous variables that affect motivation and autonomy make its measuring a particularly important issue when collecting and analysing data. Researchers have made use of qualitative methods, such as observations and interviews, and quantitative methods, such as time-on-task measurements or questionnaires (Zuckerman, et al. 1978; Deci et al., 1985b; Nix et al., 2003; Moller et al., 2006; Mozgalina, 2015).

The purpose of this research was to establish if choice-based projects had a positive effect on year 7's intrinsic motivation. For this reason, it seemed appropriate to collect quantitative data through a questionnaire to gain a snapshot of general perceptions, and then dig into the results through qualitative research by interviewing a selection of students.

Participant observation

During the initial phase of this research there was an element of participant observation. The rationale behind this was to observe the groups' routines so that once I took over the second phase of the project I would have as little impact as possible on the students' habits. In addition, it allowed me to get to know students' attitudes, which would help me evaluate any anomalies in the responses to the following questionnaires.

Questionnaire

A structured questionnaire (Appendix 1) was completed at the end of the prescribed phase and again at the end of the choice-based phase in order to measure change in students' perceptions. This self-report method has been commonly used in research to measure interest and motivation (Ryan & Deci, 2000). It was composed entirely of closed questions. Open questions were not included because the students' literacy skills were mixed and the responses would not have allowed me to make a fair comparison of student responses or to measure change. A limitation of closed questions is that they do not allow students to clarify or build on their responses. However, a sample of the participants where given the opportunity to do so during the interview stage.

The questionnaire consisted of three parts. The first part of the questionnaire asked students to measure their subjective experiences towards interest, perceived competence, pressure, effort and relevance in a five point Likert scale. Most questions were adopted from the Intrinsic Motivation Inventory (IMI) and have been used in several intrinsic and self-regulation experiments (SDT, 2015). In the second part of the questionnaire students were asked to rank intrinsic and extrinsic motivators such as: pleasing the teacher (extrinsic), or discovering new materials (intrinsic). This was designed to establish if students were more extrinsically or intrinsically motivated. In the third part students were asked to express their preferences towards the kind of choices available in an art project, such as artists, materials or final outcome.

Interviews

From the data collected in the questionnaires, I selected students whose responses were inconsistent. These included those students whose answers did not match the attitudes observed in class. I also selected students that represented different genders, socio-economic background and

special educational needs (SEN) in order to reflect the diversity of the teaching situation. In total, fourteen year 7 students were interviewed. There were an equal number of female and male students, two students were Pupil Premium, seven were EAL, and three had SEN. The open-ended interviews were conducted on a one-to-one basis. Prompts included reminding students of the structure of the project and showing them their questionnaire. I then shared particular observations with them and asked whether "they could tell me more about it".

Data analysis

The general purpose of this research was to establish if a choice-based project had a positive effect on students´ intrinsic motivation. This was measured through a comparison of the answers in the initial and the final questionnaire. Change was measured by counting points of change from the first to the second response. For example, if a student had ranked "a desire to make things" as a 5 in the first questionnaire and as a 7 in the second, this would be represented as -2. Whilst if they had originally chosen 4 and then it had moved up to 1, it would have been counted as +3.

The results have been compiled in the form of tables for the tallied responses alongside pie charts that contain the percentage of positive, neutral or negative change. The use of averages has been described as an illegitimate way of analysing ranked or scaled questionnaires (Gillham, 2000). This is because data is represented in numerical form, and such numbers are symbols for relevance rather than a value. In addition, motivation in class is extremely varied and there would be no value in identifying an abstract value that does not represent students in the classroom. No averages have been used in the analysis of this data, but I have used percentages to simplify the representation of positive and negative change.

Although it is beyond the possibilities of this research to analyse all the external variables that could affect motivation, it seemed necessary to differentiate between female and male respondents. Cohen and Oden (1974), for example, identified a strong correlation between locus of control and creativity among primary school females. In order to explore gender differentiation in this study, all parts of the questionnaire were analysed by differentiating total, female and male responses.

Finally, I have used Anderman and Anderman's (2010) four classifications of how intrinsic and extrinsic motivation coexist to examine whether there is a pattern in each students' responses depending on their gender, special educational needs, socio-cultural factors or attainment. I assessed

students' responses to the questionnaire and placed them within these four categories. This was done following the recommendations of Fredricks, Blumenfeld and Paris (2004) who argued the necessity of determining whether age, racial and cultural variables had an effect on motivation.

Strengths and limitations

Upon reflection, I have discovered a number of possible limitations in this research with regards to method and questionnaire design.

Firstly, although I conducted participant observation in the first three weeks so that I could adopt the teacher's strategies and have less of an impact on students' routines, the change in teaching style between the classroom teacher and myself could have affected the results of the investigation. Secondly, during my investigation, it became clear that peer influence affected some students' choices. Students within similar friendship groups chose similar outcomes, despite having a greater ability in other techniques. This is an interesting point that would benefit from further research to determine whether, once the work has been assessed, an increased autonomy and declined attainment would affect student motivation. For this research students were not given a summative assessment, so students' perception of competence will have not had a detrimental effect on their motivation. Finally, as a result of having more choice over the outcomes, the project took longer to complete than expected. Although students had already been exposed to all options and procedural choices when they completed the second questionnaire, they had not yet finished their final piece.

Questionnaires have certain limitations when used as a form of measurement. They are a good way of discerning extreme opposites, but they do not reveal much about the people in the middle. In addition, it has been suggested that people often do not use the whole scale and it is hard to discern why people have given those answers (Gillham, 2000). With regard to my design, I noticed that students had lots of queries when we did the initial questionnaire. As a result, the format of the second questionnaire was improved in order to maximise understanding and minimise verbal instruction. Although the questions were the same, this may have had an effect on the results.
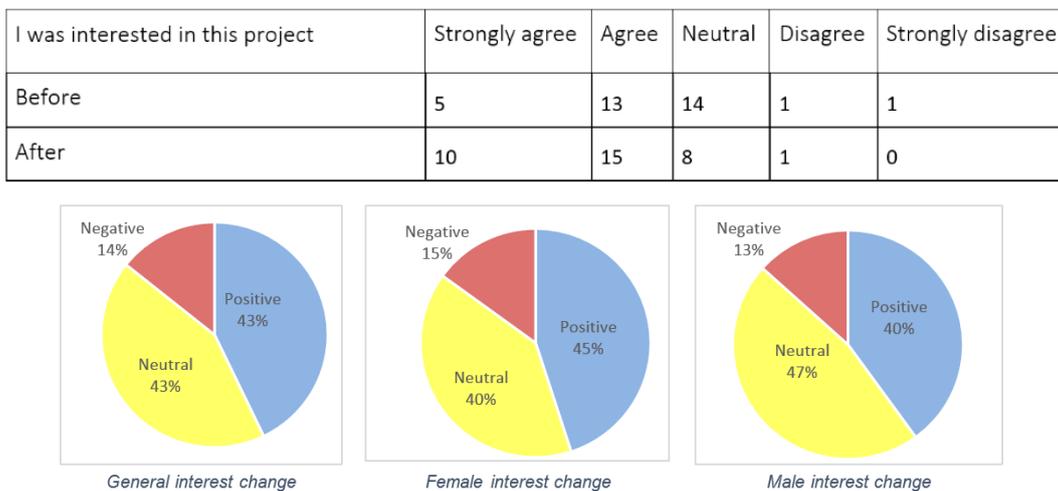
Presentation of Data

In this section I will systematically examine students' responses to each part of the questionnaire. I will compare the tallied responses to the questionnaire completed at the end of the prescribed phase

and after the choice-based phase, these are labelled before and after respectively in the tables of Figures 1-19 that follow. Each table gives the tallied responses to a particular question. Each Figure consists of a table and three pie charts, one presenting the percentage of all students who changed towards positive, neutral or negative perspectives, and two presenting the breakdown for male and female students. Following this I will evaluate if there has been a link between students' socio-economical background and whether they are intrinsically or extrinsically motivated. Finally, I will present the relevant findings from the interviews.

Questionnaire

Responses to questions in Part 1

The first question focused on students' interest for the project. 86 per cent of responses remained the same or had a more positive attitude after the choice-based project. If we look at the tallied responses, we can see that negative responses decreased, so negative change must have been directed to the more moderate columns. Therefore, we can conclude that the choice-based phase may have enhanced positive attitudes.

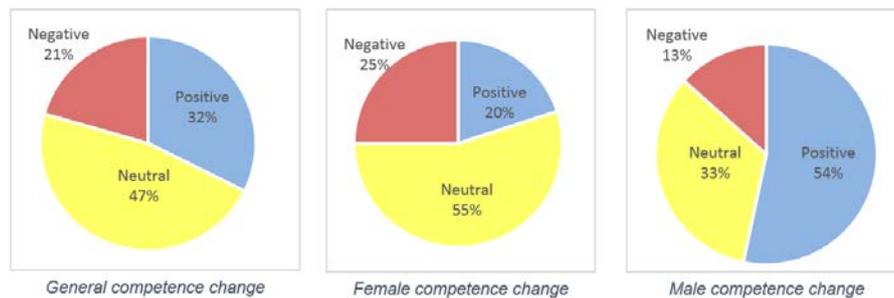| I was interested in this project	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Before	5	13	14	1	1
After	10	15	8	1	0

Figure 1: I was interested in this project

Question two asked students to reflect on their competence. The responses show that female students remained mostly neutral, while 53 per cent of boys reported more positive attitudes. In addition, if we look at the table we can see that in the second questionnaire negative responses decreased significantly. Negative change, therefore, must have been directed towards the more

neutral columns. Overall, this suggests there was a neutral or positive change in students' perceived competence. This change was noticeably positive among male students.

I was good at this project	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Before	1	16	9	7	1
After	7	7	18	1	1

Figure 2: I was good at this project

Question three is a negative statement regarding perceived pressure, and therefore, the responses need to be inversed. For most students the choice-based project did not result in more pressure. There was a shift of over 20 per cent, but if we look at their choices we can see that responses shifted towards the neutral column.

I felt pressure to do very well in this project	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Before	2	10	7	13	2
After	3	7	12	10	2
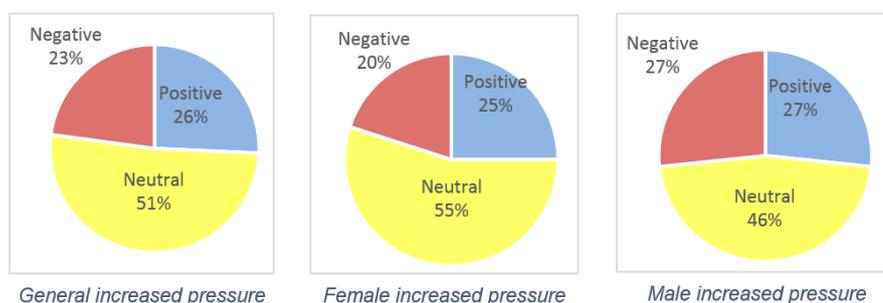
Figure 3: I felt pressure to do very well in this project

Question four asked students to reflect on the effort they had put into the project. Boys showed mostly no or positive change, while girls' responses were more dispersed and mostly negative. If we look at the tallied responses we can see that, overall, students already considered they were putting in significant effort before the choice-based project.

I tried very hard in this project	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Before	7	15	12	0	0
After	7	17	9	1	0
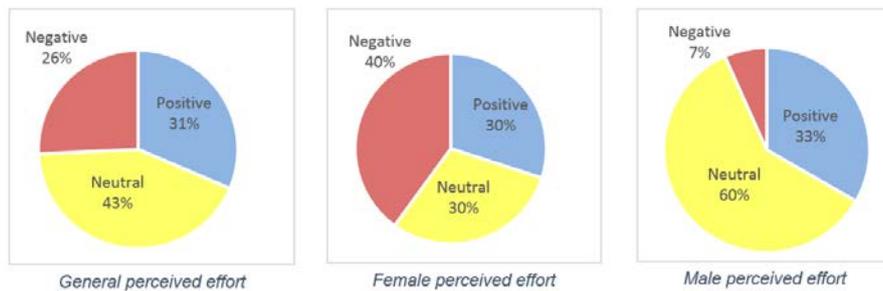
Figure 4: I tried very hard in this project

Finally, the fifth question evaluated if students thought the project was relevant for their learning. The indicators of change suggest that students' perception was neutral or positive. However, if we look at the tallied responses we can see that there was an increase of four students in negative answers, and an increase of six in positive. This suggests that students had more diverse opinions about the relevance of the choice-based project.

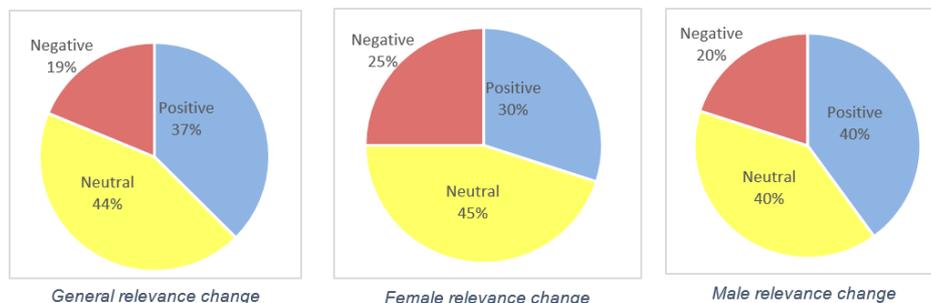| I think this project was important for my learning	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Before	4	11	18	1	0
After	10	6	13	5	0

Figure 5: I think this project was important for my learning

Responses to questions in Part 2

This part of the questionnaire required the students to rank different elements of the art projects. There were eight statements in total: the first four related to intrinsic motivation and the second referred to external incentives within an art project. Students ranked these from one, representing the most important, to eight, representing the least. During data collection, question one required some clarification on my part. This was due to the over-complex wording of the statement and, on reflection, the more simply structured "do you like to make things" would have been more appropriate for the literacy levels of the class.

This first statement referred to students' desire to create work; whether they enjoyed starting creative or technical activities to express themselves. This statement represents intrinsic motivation. According to the tallied responses from the first questionnaire the majority of students considered making things to be enjoyable. However, this decreased slightly in the second questionnaire. Male students felt more positive about the experience than female.

A desire to make things	1	2	3	4	5	6	7	8
Before	9	5	6	2	5	2	3	3
After	8	6	3	2	6	5	3	2
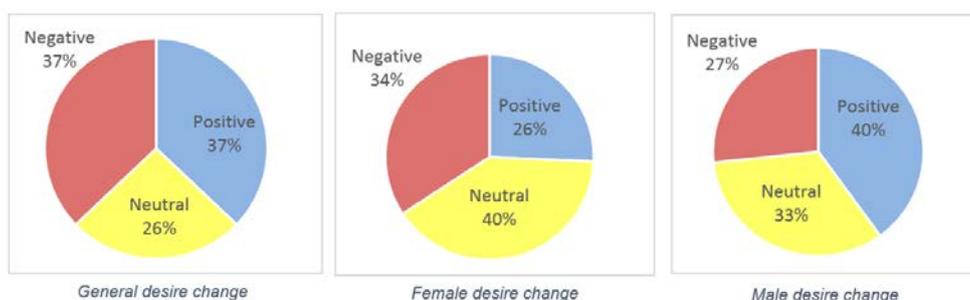
Figure 6: A desire to make things

The second statement asked students to rank the importance of discovering new materials and techniques. This statement represents intrinsic motivation. Although the responses remained distributed across all 8 possibilities, the results show that student perception improved more amongst boys than girls following the choice-based project.

Discovering new materials and techniques	1	2	3	4	5	6	7	8
Before	2	5	5	5	6	4	4	4
After	5	4	7	4	5	5	3	2
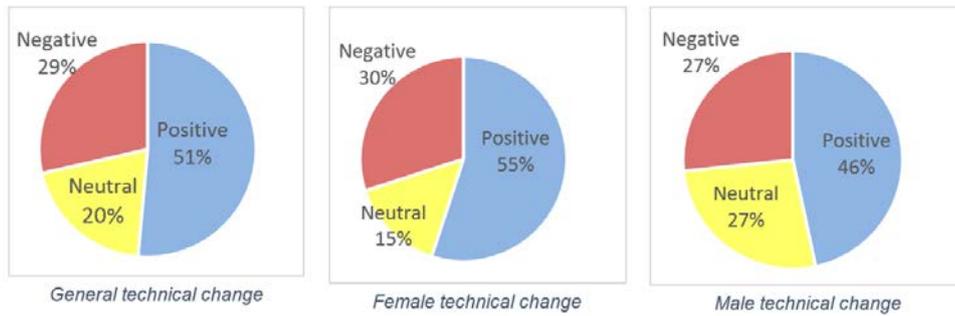
Figure 7: Discovering new materials and techniques

The third statement focused on students' attitude towards discovering new artists and represents intrinsic motivation. It can be seen that female perceptions shifted negatively, but as a whole, change remained mostly neutral or positive. If we look at the tallied responses we can see that, although after the choice-based project perceptions appeared slightly more positive, students did not rate discovering artists highly.

| Finding out about artists	1	2	3	4	5	6	7	8
Before		4	6		1	4	8	12
After	1	4	4	5	2	8	2	9
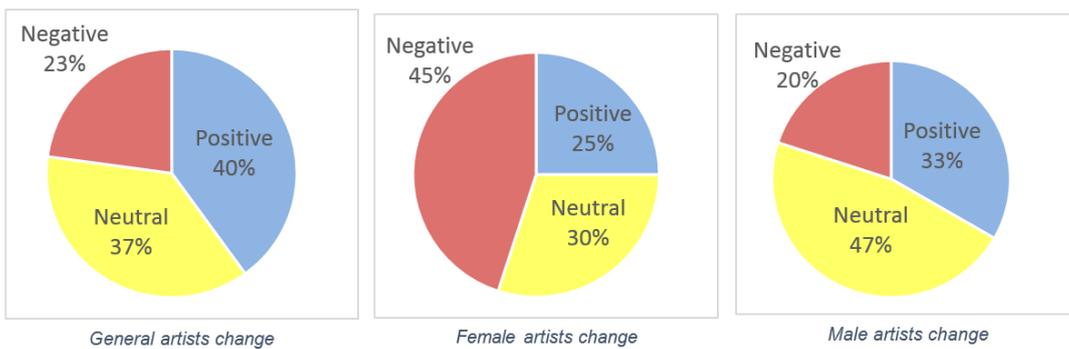
Figure 8: Finding out about artists

The final statement regarding intrinsic motivation in the art classroom showed that a majority of students changed their perceptions towards choice opportunities in the classroom. However, it was not necessarily a positive change. Change was distributed across positive, neutral and negative

perceptions. If we look at the tally, most students ranked choice as an important motivator in both questionnaires.

Making my own decisions about my work	1	2	3	4	5	6	7	8
Before	6	6	5	5	4	6	2	1
After	9	5	5	4	5	3	4	0

General choice change   Female choice change   Male choice change
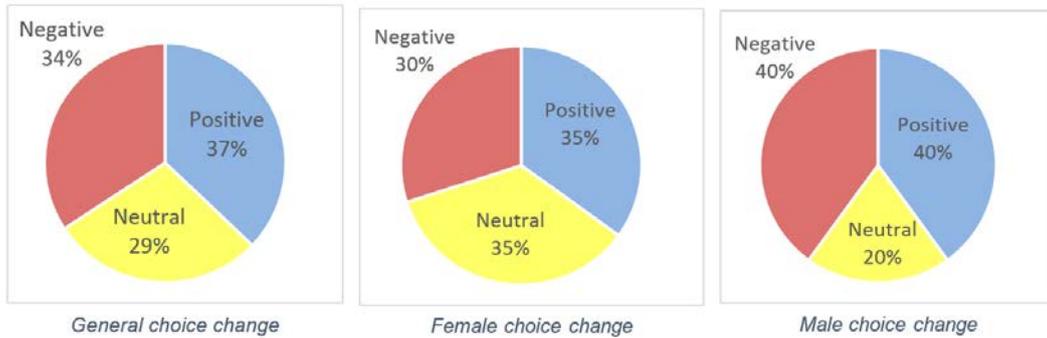
Figure 9: Making my own decisions about my work

The fifth statement focused on the extrinsic motivator of recognition from friends and family and it pointed towards a significant increase. A majority of female students felt positive, while boys had extreme positive or negative responses after the choice-based project. If we look at the tally, responses were distributed across all ranks in the first questionnaire, but shifted down in the final one.

Recognition from family and friends	1	2	3	4	5	6	7	8
Before	4	4	2	5	6	5	5	4
After	2	4	2	10	4	3	8	2

General recognition change   Female recognition change   Male recognition change
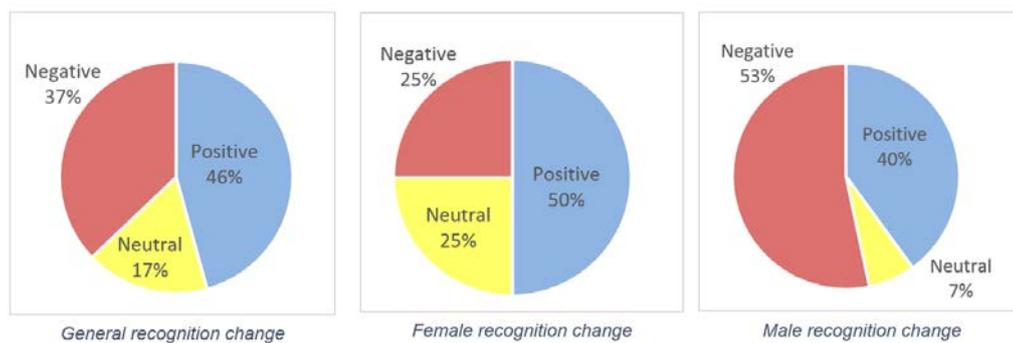
Figure 10: Recognition from family and friends

In line with the previous section, the sixth statement showed that reassurance from the teacher also shifted positively. This correlated the tallied responses, which show that recognition from the teacher was rated highly. This statement represented extrinsic motivation.

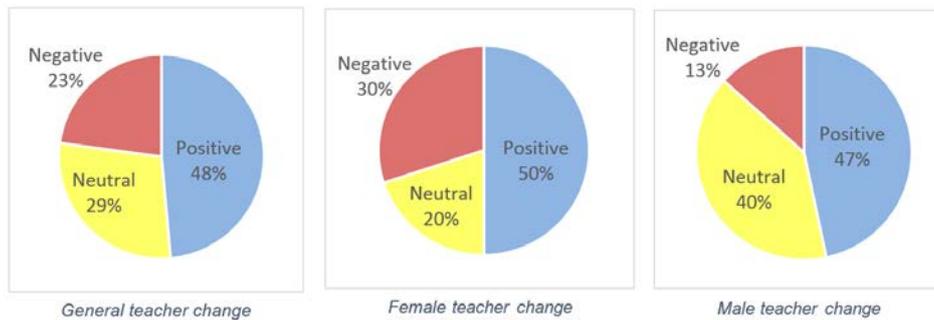| Pleasing the teacher	1	2	3	4	5	6	7	8
Before		11	7	8	3	2	3	1
After	9	2	9	5	4	3	1	2

Figure 11: Pleasing the teacher

The seventh statement asked students to reflect on how having an exam or exhibition motivated them and represented extrinsic motivation. Change was predominantly positive. Amongst females, change seemed extreme with virtually all students shifting towards positive or negative responses. Although change was positive, the tallied responses show that students do not rate showing their work as something that motivates them.

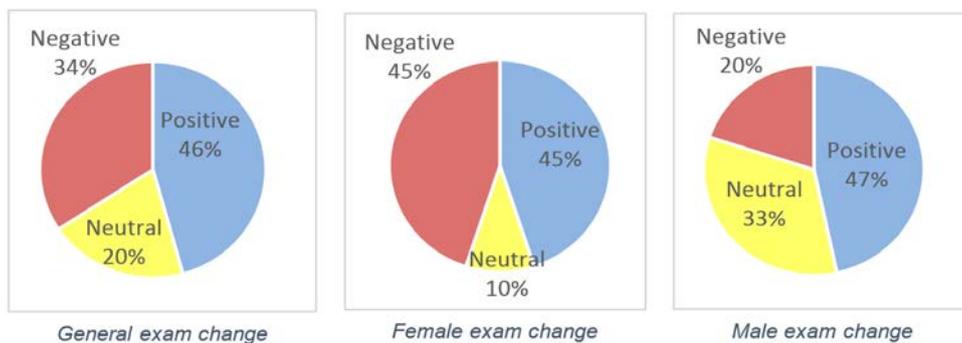| Having an exam or an exhibition	1	2	3	4	5	6	7	8
Before	2	4	2	5	5	5	7	5
After	2	5	2	8	6		7	5

Figure 12: Having an exam or exhibition

Finally, the last statement for extrinsic motivation asked students to evaluate how important getting a good grade was for them. Change was varied, but the tallied response show that this is an area that students find very important.

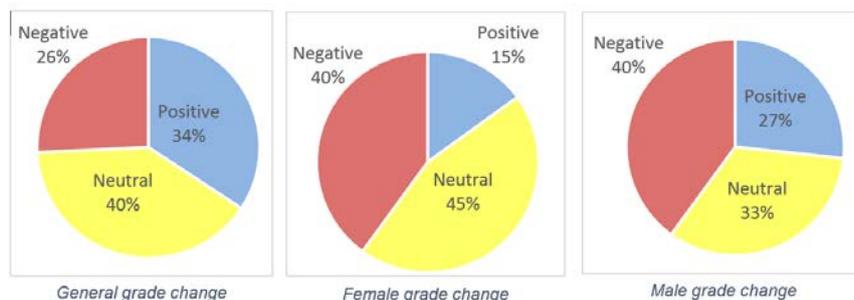| Getting a good grade	1	2	3	4	5	6	7	8
Before	13	6	7	4	3	1	1	
After	16	5	3	3	1	4	2	1

Figure 13: Getting a good grade

Responses to questions in Part 3

In this part I assessed students' preference towards certain art project related choices. The first statement reviewed students' preference towards choosing the topic of a project. The results show that students like to have a choice over the topics they explore, but there was no change in positive responses between the prescribed and the choice-based project.

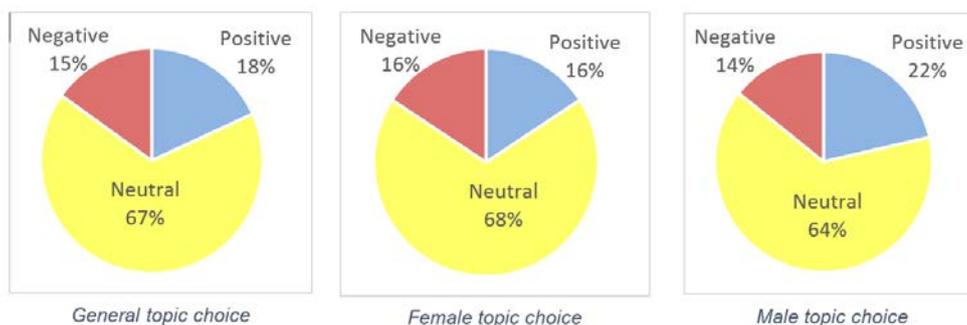| I prefer choosing the topic	Yes	May be	No
Before	20	8	5
After	20	11	2

Figure 14: I prefer choosing the topic

The second statement explored students' perceptions of choosing artists. Initially, students considered that having this choice was something they would like. However, after the choice based project some students, particularly female, were more doubtful about it. This was addressed in the interviews by student A2 who argued that without having first studied artists, it was hard to find anyone original. Therefore, they preferred discovering artists through the teacher.

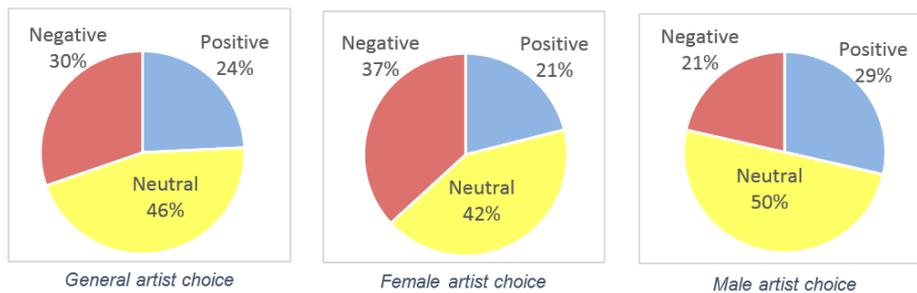| I prefer choosing my artist	Yes	May be	No
Before	17	7	9
After	15	12	6

Figure 15: I prefer choosing my artist

The third statement tackled the choice of materials, which in part two of this questionnaire showed a positive shift. This section also reflected students' interest in choosing materials. Change was not significant, and any negative responses came from male students.

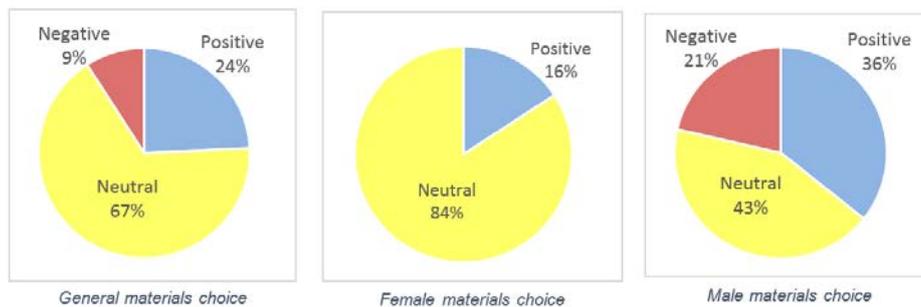| I prefer choosing the materials I use in class	Yes	May be	No
Before	16	13	4
After	21	8	4

Figure 16: I prefer choosing the materials I use in class

Statement four asked students about their interest in choosing the outcome of a project. There was a positive increase between the first and second phase of this project. This was largely due to males' positive shift. Overall, most tallied responses were positive.
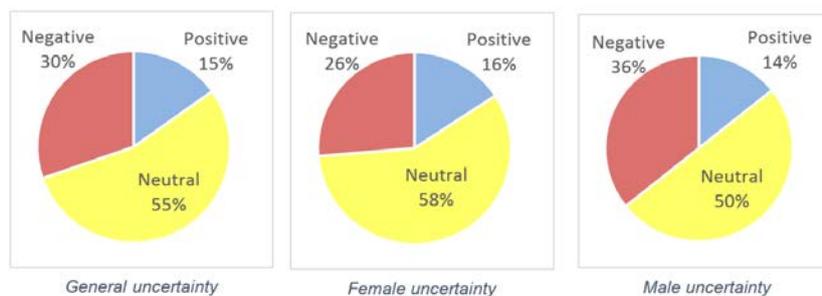
I prefer choosing what my final piece is going to be	Yes	May be	No
Before	19	13	1
After	25	6	2
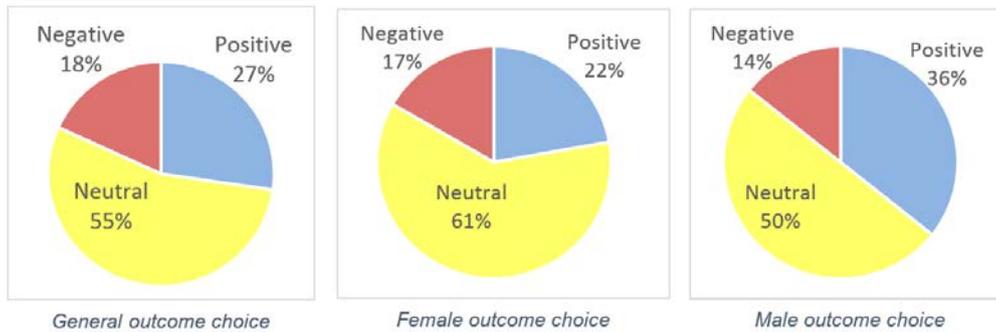
Figure 17: I prefer choosing what my final piece is going to be

The fifth statement tackled an issue which is one of the pillars of developing an art project: the uncertainty of what it is going to look like at the end. From experience, uncertainty within art projects is something that you come to understand once you have emerged at the end of a project with something to show for it. If you have never been exposed to this, it can be quite daunting. While students felt this was exciting when the teacher was guiding them step by step, once it came to developing this area independently students were more doubtful. We can see that change was mostly neutral or negative. The negative shift after the choice-based project is also reflected in the tallied responses.

I find it exciting not knowing what my final piece is going to look like	Yes	May be	No
Before	15	10	8
After	8	13	12

Figure 18: I find it exciting not knowing what my final piece is going to look like

The final statement asked students whether they like seeing the teacher's exemplar. In line with the previous question, students prefer seeing the teacher's example. There was not much change in boys' perceptions, but almost half of girls positively changed their mind with regards to this once they had started the choice-based project.

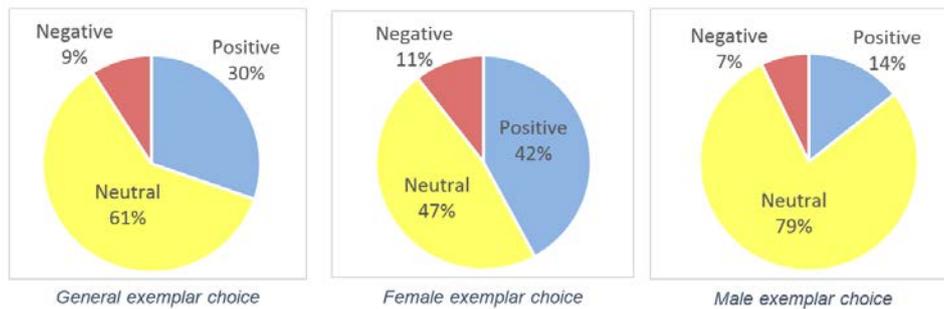| I prefer seeing the teacher's example	Yes	May be	No
Before	22	7	4
After	26	6	1

Figure 19: I prefer seeing the teacher's example

Summary of findings

Looking at the first part of the questionnaire, it is possible to identify a series of areas that showed no or minimal change after the choice-based project. Among these we can find perceived pressure and effort. It is worth noting that the majority of students felt they were putting a lot of effort into their work regardless of the choices offered. Areas where there was a more significant change include male students showing increasing confidence after being offered choice, although this could have been caused by an increase in interest for the project.

With regards the students' perception of the relevance of the project, there was an element of contradiction. For some students the opportunities for choice reaffirmed their positive perceptions, whilst others felt that the choice-based project was less relevant to their learning. A reason for this could have been that in the second phase of this research there was less direct reference to the artists in class, which would suggest that students did not consider independent practice as important as contextualising artists. In the future, it would be interesting to share the hidden curriculum with students to see if it affects their responses. Overall, students' perceptions in most sections were good or shifted positively, and male and female students showed similar patterns of change.

The second part of the questionnaire showed a negative shift in students' desire to make work. These findings contradict the increase in students' interest for the project. As stated earlier, I believe that students misunderstood this question and consequently placed it last in the ranking. There was also a decrease in students' interest in finding out about artists, but in contrast, a substantial positive change towards discovering new techniques. This could be because, at this stage in the term, work focused on making rather than on contextualising. The mood board homework attempted to create the opportunity for students to bring their personal ideas into their work more, but these results suggest that it was not integrated into the project enough and should be planned more carefully in future research. Finally, whilst students rated making decisions about their own work highly, the choice-based project may not have been the cause of this perception. This suggests that even if a choice-based project increased students' interest, they were not necessarily aware that choice had been the cause of this positive shift.

With regards to extrinsic motivation, the results suggest that students were less motivated by grades after the choice-based project. However, they did require more verification from the teacher, family or/and friends. If we look at these results closely, we can see that pleasing the teacher was valued more positively than friends or family. Given that in the second phase of the project there was a lack of imposed actions from the teacher, we can conclude that the students needed more verification. However, this could be interpreted as a need for reassurance, an intrinsic need, rather than as a desire for an external reward. Finally, we can see that perceptions towards exhibiting work changed positively, but it is not something that students like at this stage in this school. This could suggest a lack of confidence or that the school has not yet exploited this motivator.

The third part of the questionnaire focused on students' perceptions towards art related choices. The results show that students prefer a choice over materials, topics and outcomes. However, despite preferring to choose the outcome they do not like the uncertainty of not knowing what their project will look like. This was supported by their preference for seeing the teachers' exemplar. Finally, as in the second part of the questionnaire, there was a decrease in the students' interest in choosing artists. Again, this could be due to the lack of contextualisation in the second part of the project. Alternatively, when it came to completing their mood board, they may have been overloaded with choices.

Are external factors determinants of students' responses?

Fredricks et al. (2004) recommended that researchers conducted more research into differentiating students' motivation according to age, racial and cultural variables. It was beyond the possibilities of this paper to address this for part one and three of the questionnaire. However, it was possible to address it in part two; the indicators of extrinsic or intrinsic motivation. The table reproduced in Figure 20 categorises four different combinations of high and low extrinsic and intrinsic motivation. Looking at each student's questionnaires it was surprisingly clear how they fitted into one of the four possibilities.

	Intrinsic	
Extrinsic	**LOW**	**HIGH**
LOW	*Students disinterested in the task, and extrinsic incentives do not improve motivation.*	*Students highly interested in the task and does not care about extrinsic motivators*
	A1 (5c M.PP), A2 (6c F.EAL), A3 (4c F)	B1 (6c F.EAL), B2 (5a F.EAL), B3 (4a F.EAL), B4 (5a M.EAL)
HIGH	*Students is only willing to participate in the task through external rewards*	*Students truly interested in the task, but also care about receiving rewards*
	C1 (6c F), C2 (4a F.PP), C3 (4a F.K.PP), C4 (5a M.K), C5 (6a M), C6 (6c M.EAL), C7 (6a M), C8 (6c F.EAL), C9 (5c F), C10 (5c M.K)	D1 (5a F), D2 (5a F), D3 (5c F.K.EAL), D4 (5a M.PP), D5 (6c F.EAL), D6 (5c M), D7 (5c M.K), D8 (5c M), D9 (4a F.K.EAL.PP), D10 (5b F.PP), D11 (5a F), D12 (5c F.K), D13 (4a F), D14 (3a M.K), D15 (4c K), D16 (6a M.EAL), D17 (4a F.PP), D18 (5a M), D19 (5c F), D20 (5b F.EAL)

Number + letter: Students current level according to the National Curriculum Level descriptors. Colours indicate if students have reached their target. Red: Two levels below target, yellow: one level below target, green: reached target, purple: exceeded target.

F: Female   M: Male   PP: Pupil premium   K: moderate learning difficulties

EAL: English as a foreign language

Combination of Intrinsic and Extrinsic motivation (Anderman & Anderman, 2010, p.31)

Figure 20: Interpreted categorisation from students' questionnaires

As in the studies of Nix et al. (2003) and Lepper et al. (2005), there seems to be no correlation between gender, social background or ability. Most students fitted into the highly motivated categories and there were a variety of external factors in all categories. It is interesting to see how all students who defined themselves as highly intrinsically motivated are EAL students. In addition, from participant observations in class it seemed strange to categorise student A2 as amotivated, as her achievement and effort in class are very high. After the interview, it became clear that this student has very high expectations of herself and low self-esteem. It is worth noting that Pupil Premium students have poor attendance and half of them were excluded from this research. An attempt to measure this area with my research design would have been inconclusive. Future research on motivation and Pupil Premium should take this into consideration.

Interviews

Students were selected according to the criteria of showing different levels of extrinsic and intrinsic motivation discussed in the previous section; students whose responses had varied exponentially from one questionnaire to the other; and also representatives of a range of genders, PP and SEN. For convenience, coded student names in this section are the same as in the previous table. During the interviews students were asked to expand on their responses in part two and three of the questionnaire. In general, their verbal responses supported what they had answered in the questionnaire. What did change was the level of student self-reflection.

Regarding choice, with the exception of one student with special needs who did not engage in the discussion, it became clear that students liked choice. There were a range of reasons depending on their motivations. For example, a PP male student (A1) who had been classified as someone in the *amotivated* category, showed that he liked choice because it allowed him to stand out from the crowd.

> *"In lessons I don´t like going along with every shape that everyone else is doing. It gives it a bit more imagination, but I like seeing how the teacher does textures and things (…) it gives you a bit of an inspiration"* - A1

In contrast, a student who was in the same group, but with an above average attainment preferred choice because it allowed her to explore what she felt more competent at:

> *"(…) It is much better because may be I am better at one thing that the other and it [being given choice] just kind of helps me"* - A2

Student B4 suggested that having a choice of three artists or materials was ideal, because otherwise he did not know where to start. Student A1 specified that without the teacher's suggestions he would always choose the famous ones, which were the only ones he knew. Regarding materials, some specified that they did not want to be told what to do with materials, just to be given the options (D20). Their views towards the teacher's example was similar. Students stated that it was beneficial for their work to refer to the teacher exemplar when they get stuck, but they did not want to be told what to do with it (D7, D11). Student D20 specified that this was particularly useful when visualising difficult concepts such as cubism.

Discussion

My first research question aimed to confirm the link between choice and intrinsic motivation. Nix and his colleagues' studies (Nix et al., 2003) concluded that choice did not have as much impact on intrinsic motivation as locus of control and volition, and suggested that the link between choices and autonomy had been taken for granted in the past. The findings from my study support these conclusions. Data from the questionnaires and the interviews suggest that, although the students did not distinguish between choice and personal control in the investigation, they value control more than choice. Control seems to be the main drive for students' positive attitudes towards materials, outcomes, teacher exemplars, perceptions of competence, general interest in the project and recognition. This suggests that whilst choice may be the action through which we can achieve autonomy, it is not the essence of autonomy itself.

My second research question focused on the opportunities for choice in the art classroom. Students' responses towards exploring artists independently suggests that perhaps model seven (choice of topic, set materials, choice of outcome), which I initially suggested was the most appropriate, is perhaps not. The students' attitude towards artists after completing the mood board suggests that by this stage students needed a rest from choosing. However, contextualising art projects is something

in the NC that we should not abandon after the initial introduction to a project if we want students to maintain their sense of *relatedness*. When being interviewed one of the students stated:

> *"[I] kind of [prefer] both (…) so the teacher shows her example and I take bits of that and make my own". –D11*

This statement is interesting because the way this student approaches the teacher's exemplar is similar to how we expect KS4 students to respond to artists' work. So perhaps this dependence is not detrimental to students' preparation for GCSE, even if it is not completely autonomous.

The third question focused on students' perception of choice. It has become clear that students wanted to have meaningful options, but not free options. This correlates with Mozgalina's research which linked free choice with ego-depleted attitudes (2015). For example, students' responses reflect that they want to choose the outcome, but they prefer to have guidance over the products they are choosing from, for example through the teacher exemplar and recognition. There were similar results on students' preferences for experimenting with materials.

We can conclude, therefore, that there was a positive change in students' attitudes to learning when offered a selected amount of choices. With a few exceptions on very specific areas, there were no major differences between female and male respondents. This shift seemed to be caused by the students' perception of control, and not necessarily by choice itself.

Conclusion and recommendations

What is considered good practice and what we should be encouraging students to do is dependent on each teacher's rationales for teaching art education. Prescribing projects in order to achieve higher technical skills may seem like the most efficient way to do this. It is also easier for teachers to deal with the logistics of tidying up and dealing with mixed ability groups if all students are sitting down doing the same thing. However, the results from this paper suggest that students' preference for experimentation and the opportunity to perfect their technique, in addition to the ability to work independently and encourage risk-taking, can be enhanced by the choice-based project. Consequently, it would seem that giving students more ownership over their work may be beneficial overall.

As indicated by Fredricks et al. (2004), further research is needed to explore PP and different ethnical backgrounds in more depth. However, I wonder how possible this is. For example, one of the students in this classroom is from Indian ancestors, was born in Italy, and recently moved to England. How much can we narrow down ethnic background in an increasingly globalised world? It might be getting to the point where someone's official nationality does not represent their cultural heritage and, as a consequence, it cannot be used as a differentiating factor in quantitative research.

At the start of this paper I defined the three basic needs for self-determination to be competence, relatedness and autonomy. Now that we have a clearer view on how KS3 students face autonomy in the classroom, there are opportunities for further research to explore if the three basic psychological needs affect the sense of self-determination at an equal measure.

This research aimed to establish whether we could make KS3 students more participative in the development of their learning. The results confirm that within certain limitations, year 7 students are prepared to face choice. Consequently, we should explore how we can support KS3 students in developing their own personal views of the world within the art classroom.

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Appendix 1

Questionnaire after prescribed phase

[Part 1]

What did you think of the cubist style still life we have done from the bottle?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I was interested in this project					
I was good at this project					
I felt pressure to do very well in this project					
I tried very hard in this project					
I think this project was important for my learning					

[Part 2]

Rate these from what motivates you the most (1) to the least (8):

A desire to make things	
Discovering new materials and techniques	
Finding out about artists	
Making my own decisions about my work	
Recognition from family and friends	
Pleasing the teacher	
Having an exam or an exhibition	
Getting a good grade	
Other:	

[Part 3]

When doing an art project…

	Yes	Maybe	No
I prefer choosing the topic			
I prefer choosing my artist			
I prefer choosing the materials I use in class			
I prefer choosing what my final piece is going to be			
I find it exciting not knowing what my final piece is going to look like			
I prefer seeing the teacher's example			

Questionnaire after choice-based phase

[Part 1]

Think about all the choice you have had when producing your final sculpture/collage whilst reading each of the following statements. Rate each statement by placing a tick in the box which **best** represents what you think. For example, if you *strongly agree* with a statement place a tick in column '1', if you *strongly disagree* place a tick in column 5.

	Strongly agree 1	Agree 2	Neutral Not sure 3	Disagree 4	Strongly disagree 5
I was interested in this project					
I was good at this project					
I felt pressure to do very well in this project					
I tried very hard in this project					
I think this project was important for my learning					

[Part 2]

Read the following statements and rate each one on a scale of 1 to 8 with 1 being what motivates you the most and 8 what motivates you the least: Place a tick in the box which best represents what you think.

	1	2	3	4	5	6	7	8
A desire to make things								
Discovering new materials and techniques								
Finding out about artists								
Making my own decisions about my work								
Recognition from family and friends								
Pleasing the teacher								
Having an exam or an exhibition								
Getting a good grade								
Other:								

[Part 3]

Indicate your level of agreement with each of the following statements by placing a tick in the appropriate box.

When doing an art project I…

	Yes	Maybe	No
prefer choosing the topic			
prefer choosing my artist			
prefer choosing the materials I use in class			
prefer choosing what my final piece is going to be			
find it exciting not knowing what my final piece is going to look like			
prefer seeing the teacher's example			