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Motivation and Vocational Decision of Secondary School Students with Dyslexia

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ABSTRACT

This study investigated the vocational decisions of adolescent students with dyslexia. The study aimed to examine the possible relationship between motivation and vocational decision of secondary 3 and 4 students with dyslexia and to explore other possible influences which may contribute to vocational decision-making of this particular group of students. A mixed model research design was employed using both a paper-pen questionnaire and phone-call interviews. Statistical analysis revealed that both intrinsic and extrinsic motivation types were not significantly related to decision making. However, the participants who had a clear indication of their vocational decisions were found to have high motivational levels, meeting all three needs of competence, relatedness and autonomy through the interview sessions. Of the seven identified influences that were thought to affect vocational decisions, social media was found to be the least important factor while family was found to be the most important factor.

In addition to providing rich data from their personal perspectives, the interviews revealed an unexpected factor on the concerns regarding the working environment. The implications for future research highlight the very individual responses elicited from this group of dyslexic students in Singapore, prompting educators, practitioners and parents of this target group to understand the vast individual differences of these students instead of searching for a pattern.

Keywords: jobs, vocations, decision-making, Singapore, teens, students, dyslexia, adolescence, motivation, Self-Determination Theory (SDT)

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INTRODUCTION

The Problem - Challenges faced by children with dyslexia

Dyslexia is a learning disorder characterised by difficulties in reading and spelling (American Psychiatric Association, 2013). Children with dyslexia display phonological deficits, including difficulties in decoding, letter naming, letter reversals, reading accuracy, reading fluency, vocabulary acquisition, comprehension and written expressions (Snowling & Hulme, 2012; Kasirer & Mashal, 2017; Razuk, et al., 2018; Brooks, Berninger, & Abbott, 2011; Morken & Helland, 2013). Underlying these difficulties are factors including visual- perceptual difficulties, inefficient working memory and deficits in executive functions (Altemeier, Abbott & Berninger, 2008; Brooks, Berninger, & Abbott, 2011; Boyle & Jindal-Snape, 2012). Hence, especially in a school context, dyslexia could lead to negative impacts on academic achievements to a significant extent. As a result, some children with dyslexia reported low self- esteem and overall psychological wellbeing which may even lead to behavioural issues (Alesi, Rappo & Pepi, 2012; Jordan & Dyer, 2017; Terras, Thompson & Minnis, 2009; Chan, et al., 2003). Other researchers, however, attribute behavioural issues to the comorbidity with disorders such as ADHD (Germanò, Gagliano and Curatolo, 2010).

Nevertheless, dyslexia is a language-based learning disorder which could manifest in various languages across the world and is thus widely-studied (Bonifacci, et al, 2017; Palladino, et al, 2016; Suárez-Coalla and Cuetos, 2017).

Specific Challenge: Motivation and Vocation

Adolescence is a vulnerable stage fraught with challenges (Burke, Brennan & Roney, 2010), because they are required to make numerous decisions daily as well as major vocational decisions (Santrock, 2006). Decision-making is a process which requires adequate maturity and cognitive abilities to compare choices, make decisions and face consequences (Özkamali, et al., 2014; Sharma, 2014) vulnerable to motivation and influences, such as peers, educators, parents, media and self (Santrock, 2006; Li, Hou and Jia, 2015; Gehrau, Brüggemann and Handrup, 2016).

Decision-making uses executive functions in the brain responsible for organisation, planning and making decisions (Stuss and Knight, 2013). An individual with weak executive functions may face difficulties with making decisions. Although this fits the profile of dyslexic learners, further research is needed to establish this for dyslexic learners in Singapore.

Studies have found associations between adolescents' career indecisions and various individual factors such as personal interest and self-concept and interpersonal factors such as media and parents (Gehrau et al., 2016; Polk, 2015; Pellerone, 2015; Crisan and

Turda, 2015; Marcionetti, 2014; Kuzucu & Şimşek, 2013; Emmanuelle, 2009). However, this does not include the possible effects of dyslexia. Therefore, it is not certain whether dyslexia serves as a mediating factor to vocational decisions or contributes to indecisions

LITERATURE REVIEW

This study investigates the relationship between motivation and vocational decision of upper secondary students with dyslexia. Secondly, it explores other possible influences on vocational decision-making of this particular group of students. Questions arising;

1) What are the factors affecting vocational decision in adolescents?
2) How does vocational decision in adolescents relate to motivation?
3) How does vocational decision relate to motivation for this particular group of students?
4) What other influences affect vocational decisions for this particular group of students?

Drawing on past research studies and journals, this literature review presents a preliminary overview of adolescents with dyslexia in the local context.

Guided by theoretical frameworks, the study addresses identified research questions by testing some of the tentative claims and filling research gaps in this field.

Theories linking vocational decisions and motivation

Focusing on emotional wellbeing, motivation cannot be studied without relating to self-esteem. Empirical evidence points towards low self- esteem of students with dyslexia (Alesi et al., 2012; Jordan and Dyer, 2017; Carawan et al., 2016). For this study, two theories had been selected to be discussed and compared, namely, the Social Cognitive Career Theory (SCCT) and the Self- determination Theory (SDT).

Social Cognitive Career Theory

Extending Bandura's theory, which highlighted the impact of interpersonal interactions on behaviour and thoughts, the Social Cognitive Career Theory (SCCT) postulates that an individual's interest or decision on a career is directly influenced by a combination of personal, cognitive and contextual factors (Lent et al., 1994). Researchers have used the SCCT to highlight the importance of parental support in career development (Ginevra et al., 2015; Raque-Bogdan et al., 2013) because it is adaptable and applicable across different constructs.

Self-determination Theory

The Self-Determination Theory (SDT) postulates that the decisions and behaviour of an individual are closely guided by his level of motivation (Deci and Ryan, 1985).

However, human thoughts and cognitive abilities are complex and rarely driven by a single motivation. The SDT acknowledges this by proposing a continuum of varying degrees of motivation. One end of the spectrum lies amotivation, lack of motivation, or simply a lack of interest or intention. This is followed by external motivation, being controlled or pressurised by others.

Intrinsic motivation, by contrast, refers to being autonomous or able to internalise behaviour independently. The SDT maintains that intrinsic motivation promotes an ideal goal-directed behaviour (Deci and Ryan, 1985).

According to SDT, both types of motivation drive an individual towards meeting three basic needs, competence, autonomy and relatedness. Competence refers to an individual's need to build knowledge and develop skills to gain mastery in performing important tasks. Autonomy refers to the need to be in control over his own behaviour and thoughts. Lastly, relatedness refers to the need to build a sense of belongingness and feeling connected with other individuals. Where these three needs are strongly met, the individual is said to be highly intrinsically motivated and self-determined to pursue the task of interest (Deci and Ryan, 1985; Vallerand,2000).

The SDT theory has been well-validated and applied to the organisational environment of working adults, for example, finding that salary or financial benefits did not enhance the intrinsic motivation of bank employees, but intrinsic motivation from managerial support within the organisation (Olafsen et al., 2015). Studies of graduates or students before entering the workforce, (Chiesa and colleagues,2016), examined the career decision-making self- efficacy of students. The SDT was also widely used to investigate the motivation and self-regulation of behaviours or thoughts in individuals, for learning, behavioural intervention and weight loss intervention (Ünlü and Dettweiler, 2015; Webber et al., 2010; Duffy and Azevedo, 2015; Yardley et al., 2016; De Bilde et al., 2011).

Comparing SDT and SCCT, the SDT better fits the purpose of this research and was selected as the guiding framework. The SCCT adopts the concept that a decision is driven by the individual's self-efficacy and his outcome expectation whereas the SDT attributes the decision to the level of motivation of each individual. A dyslexic student might not be exposed to possible outcome expectations and might lack the cognitive ability required for ongoing feedback and adjustments. Moreover, struggling with dyslexia may result in low self- esteem in general. Thus, employing the SCCT, which is highly dependent on self- efficacy, is perceived to be less applicable to the context of the current study.

By contrast, a dyslexic student responds well to positive energy and is driven by motivation. Comparing the elements in both theories, self-efficacy can be similar to competence and outcome expectation can be seen as autonomy.

The sense of relatedness, in this case, has taken a backseat by being part of the background learning experience of individuals in the SCCT. More importantly, these are seen as merely factors affecting the choice in the SCCT whereas the SDT places these as individualised needs and drives. In fact, promoting self-determination has been the focus for students with special needs (Wehmeyer, 2004). Therefore, with a straightforward framework, the SDT is a more comprehensive theory in understanding and examining the potential connection between motivation and the decision-making of individuals.

Factors affecting vocational decision in adolescents

Decision-making, associated with career and choice, can be an overwhelming and complex process for adolescents who are exploring the world and gradually gaining autonomy from their parents (Olle and Fouad, 2014). Despite exposure and accessibility to various sources of information they may not possess full maturity and cognitive abilities to use this information to make an informed decision. On top of the natural developmental process, dyslexia adds a layer of complexity for these adolescents, with possible impacts on decision-making.

Central to SDT are the three basic human's needs: competence, autonomy and relatedness, integrated to examine their influence on these students. Competence would be represented by individual school results, which if seen as important would motivate him and help him in choosing a career. Autonomy would be represented by their choices when ranking the identified factors. Relatedness would be represented by factors such as peers and family members. If all three needs were met, it implies that the student is strongly self- determined. Factors identified as affecting their vocational decision are discussed in detail below.

Peers and role of friendship

Friendship plays a vital role in the development and formation of an identity (Sullivan, 1953, as cited in Jones et al., 2014). Many school-aged adolescents are spending more time with friends compared to family members (Jones et al., 2014). Which increases the tendency to value peer opinions (Brown and Larson, 2009, as cited in Jones et al., 2014; Scalici & Schulz, 2014). Peer influence can impact on smoking, alcohol consumption, impulsivity and risk- taking, body dissatisfaction, internet abuse and other delinquent behaviours (Zimmermann, 2010; Yu et al., 2013; Webb & Zimmer-Gembeck, 2013; Jones and Magee, 2014; Centifanti et al., 2014; Scalici and Schulz, 2014; Al-Zalabani and Kasim, 2015; Litt, Stock and Gibbons, 2015; Ballarotto et al., 2018; Hormenu et al., 2018). Less studies examined the positive effects of peer influence, including career choice,

school involvement, academic achievement, protection from bullying, overall health and well-being and other prosocial behaviours (Robnett and Leaper, 2012; Chow et al., 2015; Williams and Anthony, 2015; Meuwese et al., 2017; Barcaccia et al., 2018). This is consistent with Jones and colleagues' finding (2014) that peer influence plays a significant impact on youths, in both positive and negative ways.

However, it is important to note that this might differ for youths with dyslexia, who may be socially anxious, possess low self-esteem or even be depressed (Thaler et al., 2010; Undheim and Wichstrom, 2011). They may be less vulnerable to peer influence than typical adolescents, however, a recent study has found that adolescents with dyslexia do not have a negative self- image (Lindeblad et al., 2016), but can be as sociable and dependent on friendships as their typical peers, which could be a positive effect of increased awareness of dyslexia. Although more research is warranted, this partially supports the strong factor of peer influence in decision-making for adolescents with dyslexia, as with typical adolescents.

Parents and family members

Parents and family members provide each child with the first point of contact to the social world by creating an environment where learning starts and influences a child's life. (Sharma, 2014; Harris and Goodall, 2008; Gonzalez-DeHass et al., 2005). In a study by Liu and colleagues (2015), parental influence on career choice of children can be intentional or unintentional , with expectations, responses to the child's career curiosity and encouragement of independent career decision making. Other studies have also recognized the influence parents have on adolescents in vocational decision making (Katz et al., 2018; Lim and You, 2017; Marcionetti & Rossier, 2017; Fouad et al., 2016; Kim et al., 2016; Wang et al., 2016; Sharma, 2014; Slaten and Baskin, 2014; Sovet and Metz, 2014; Olle and Fouad, 2014; Metheny and Mcwhirter, 2013; Nawaz and Gilani 2011; Pappas and Kounenou, 2011). However, as a child grows into an independent adolescent, time spent with parents tends to be less (Jones et al., 2014), a trend found in local youths. Specifically, a survey in Singapore by the National Youth Council (NYC, 2014) showed that most youths spend less than 10 hours with family or relatives in a week. Despite this, 70% of youths in Singapore noted that strong family relationships are an important life goal to work towards (NYC, 2016). Parental guidance, support and involvement remain as important factors affecting various decisions of adolescents.

For children with dyslexia, many parents participate in their learning and academic process since diagnosis and intervention cannot be implemented without parents' acknowledgement and consent (DAS, 2018). With growing awareness of dyslexia, teachers would inform parents if their child shows any signs of learning difficulties during classroom interactions and hopefully engage early intervention.

This means that dyslexic children tend to receive strong parental support, both directly by

supportive reading activities and indirectly by engaging intervention programmes and thus may create a close bond (Griffiths et al., 2004). In particular, strong parental support was found to be evident in the experience of dyslexic students (Brante, 2013). Parents' influence and opinions may hold a great value in the eyes of dyslexic adolescents during decision-making opportunities including future careers.

Social media and the internet

According to the National Youth Council of Singapore (NYC, 2014), a high percentage of youths use the internet daily for both social interactions and information seeking. This trend has been studied worldwide, including UK, Korea, Japan, China, Spain (El Asam et al., 2018; Casaló and Escario, 2018; Mihara et al., 2016; Li et al., 2018; Seok et al., 2018), as this caters to developmental tasks through exploring the world and finding their self-identity (Borca et al., 2015). However, Ballarotto and colleagues (2018), noted the lack of maturity in self-regulation allowed many youths to be vulnerable to excessive internet use. This leads to a negative impact in terms of maladaptive internet abuse, and media exposure with smoking, substance use, negative body image, aggression and violence and dangerous driving behaviours (Villanti et al., 2011; Al-Sayyari and Al- Buhairan, 2018; Rousseau and Eggermont, 2018; Wiedeman et al., 2015; Wright and Silberman, 2018). Heavy use of the internet has the potential to alter mindsets and change behaviour in this age group.

Dyslexic learners may be less familiar with media and internet use, because of their reading difficulties, and less dependent on them. On the contrary, the use of digital technology and ICT tools for intervention (Vasalou et al., 2017; De Avelar et al., 2015), as a coping mechanism or for compensatory strategies (Zikl et al., 2015) mean that dyslexic youths may be equally heavy users of the internet and thus vulnerable to the influences from them.

Beacham and Alty (2006), established the effect of digital media on the learning of dyslexic learners more than a decade ago. This further supports the idea that the internet and media, which adolescents are familiar with and well-exposed to, can influence individual thoughts and thus decision-making.

School factors- teachers and academic achievements

In the local secondary school curriculum, some schools set aside teacher- student bonding time on a weekly or daily basis, usually at the start of the day. This can increase understanding, support and guidance at an individual level. Class teachers also conduct the Education and Career Guidance programme (ECG) according to local syllabus, enhancing the bond through career exploration in a classroom setting (MOE, 2012). It is hoped that these platforms allow form teachers to connect better and thus offer guidance to individual students.

For examinable subjects, teachers may emphasise on academic achievements too much, leading to academic stress in students in Singapore (Huan et al., 2008). Teachers have required curricula to follow and performance targets to meet, and there is a positive link between career opportunities or success and academic achievements. Such association is not unique to the local context and has been widely studied (Negru-Subtirica and Pop, 2016; Beigi et al., 2018; Kool et al., 2016; Sawitri & Dewi, 2015). Most job applications request certificates and qualifications in a relevant field. Furthermore, some courses in specific fields have a minimum grade as a requirement. This further highlights the importance of education. In fact, Das and Tripathy (2016) had even come up with a system to predict future careers based on students' results, which further validated this relationship.

For dyslexic students, academic performance may not necessarily be aligned with their capabilities. Although Crisp and colleagues (2012) found no significant difference between dyslexics and non-dyslexics in answering examination questions, Pluck (2018) found that reading ability is a significant predictor of academic achievement. Therefore, dyslexics are disadvantaged due to their difficulties in reading, causing them to score lower than their typical peers. Locally, parents are also concerned about the results for their children, which reinforces its importance. Some parents adopt the idea of helping children realise their academic ability through examination results.

Students internalise these ideas and believe that their future is dependent on their academic achievements. Consequently, at upper secondary level, some students feel restricted to pursue their career in vocational institutes. In essence, at both individual and societal levels, academic achievements are important with regards to career choice.

Personal interest

Interest is the driving force behind an individual's attention, behaviour and decision. AnbuSelvan and colleagues (2013) revealed that, among the identified specific factors affecting students in choosing dentistry as a career, self-interest was the most common reason. Similar results were also found in career choices in the specific fields of nursing and engineering (Liaw et al., 2017; Mishkin et al., 2016), as an influential factor in career decision making.

At this point, it is important to note that factors influencing the complex process of decision making are often interlinked. For example, in a study by Taskinen and colleagues (2013), school factors played a vital role in students' interest in science subjects, which in turn, relates to their interest in science-related career. In another example, Krass and Miller (2018) explained that interest in teaching as a career was brought about by different motivation factors. Although children with learning difficulties may face greater challenges academically and may tend to exhibit less interest in professional careers, learners with dyslexia base their careers on their interest, among

other factors (Diakogiorgi and Tsiligirian, 2016). In essence, previous research recognised personal interest as a contributing factor affecting the career choices of adolescents with or without dyslexia.

Prospective salary of the future job

In terms of employment, it is not surprising that adolescents take into consideration the prospective salary before deciding on a career choice (Ogoweeo, 2010; Xia, 2016). With a strong association between education and the labour market, some individuals start planning for their future by enrolling into a relevant course that would bring them a higher income (Strapp et al., 2018). According to Xu (2013), individuals such as college majors are higher paid, highlighting the importance of choosing courses.

Specifically, it was found that increasing the expected wage range in nursing attracted more students applying for nursing courses (Schweri and Hartog, 2017). Furthermore, other than monetary benefits, a study conducted by Bryson and colleagues (2011) revealed that higher salary improved employee performance. This relationship was also supported by another study, which found that insufficient salary led to job dissatisfaction (Murawski and King, 2011). More importantly, recent research shows a link between recruitment and higher salary, Faberman and Menzio, 2018). These studies provide proof that monetary returns affect career choice starting at college level, before working age.

However, a high percentage of students, 90%, found that they need additional support such as career guidance to determine their career goals, despite being enrolled in a specific field of study (Kiran and Karaca, 2018). As such, students may be enrolled in a specialised field without clear career plans. This further testifies to the confusion of identity and future vocational outcomes of adolescents. For adolescents with dyslexia, there were limited studies investigating the extent of prospective salary and their career choice, thus it warrants more investigations on this particular group of students.

Other influences affecting Vocational decisions of adolescents with dyslexia

In the context of dyslexia, many subscribe to the belief that dyslexics struggle with language but tend to be artistic in nature and may be considered creative. However, Martinelli and Schembri (2014) reported that the creativity of dyslexics is debatable with no significant differences in their study. This is also consistent with a recent review conducted by Šimčíková, (2018). It is thus uncertain whether local dyslexic adolescents would think creatively about factors other than those listed above, which would have the potential of affecting their vocational decisions.

Additionally, the study provides a platform to gain deeper understanding about support for students with dyslexia. According to Singer (2008), students with dyslexia depend strongly on parental support, based on high academic demand and peer pressure at

school. This makes them more dependent on their support, however, there is no evidence that all dyslexic students have supportive parents or family members. Other sources of support for coping with dyslexia may be identified through the current research.

METHOD

Participants

Participants were recruited via the Dyslexia association of Singapore, a nation-wide organisation providing intervention for students with dyslexia, via educational therapists who worked directly with the students. A sample of 41 students studying at local schools took part, with the inclusion criteria of school level (Secondary 3 or 4) and diagnosis of dyslexia. To ensure anonymity, no information with regard to gender, specific age and school names were collected. 8 students agreed to participate in a follow- up interview session, and 6 students (14.6%) were available to contribute data.

Measures

There were two measures used in this research; a questionnaire and interview. In view of the specific needs and nature of the study, as well as the unique profile of the participants, questions were newly-designed by the researcher with consultations with the appointed supervisor, instead of utilising a standardised test or lengthy personality tests. The questionnaire was two pages long with 4 main questions, each with simple and clear instructions. It aimed to assess the vocational decidedness of students, their motivation type, whether they are intrinsically or extrinsically motivated. (see appendix for questionnaire).

During the administration, the questionnaires were printed and given out to participants by their direct therapist. Statistical or numerical data gathered from the questionnaire would allow the researcher to interpret and analyse them, while results gathered through open-ended questions would provide richer information for researchers to gain insights of the participants (Heiman, 2013).

The interview session served as a follow-up from the questionnaire, to gain deeper understanding of the questions presented in the written questionnaire through eliciting further elaborations and personal opinions (Auerbach & Silverstein, 2003). It could also allow researcher to gain more information to support the data gathered and to capture any other points for discussion which might have been missed out by the researcher. For those who indicated their keenness to participate in phone-call interviews, the researcher contacted them in person and recorded the conversation before transcribing them in verbatim.

Data analysis

The data collected through paper questionnaires was used for quantitative analysis, to investigate the potential relationship between decidedness and motivation. The first question, on decidedness, divided the sample into two groups, with t-tests to examine and identify any significant differences (Creswell & Creswell, 2017). An assessment of frequency would provide statistical understanding of the importance of factors, gathered through the ranking question. This would provide information on the discussion and understanding of their trend of thoughts.

For the structured questions and the interview questions, a coding process would be performed to extract common themes. It is important to maintain an open mind in order not to be biased when analysing data collected. As explained by Auerbach & Silverstein (2003), the coding process consists of several steps. Firstly, the researcher has to refer to the main research concern and theory in order to select relevant text from the transcripts. These relevant texts could reveal repeating ideas with or without exact words and phrases. These repeating ideas are then organised into categories called themes. Some themes for the current research which may surface could be the importance of friendship and family. Additionally, dyslexic students typically suffer academically and are low in confidence. They may not have any ideas on their future vocations and may not reveal motivation at all.

Hence, another possible theme may be the sense of inferiority. While it is possible that these themes would be apparent from the interview sessions, the researcher was also open to new themes that might be analysed through the transcripts. Themes would then be grouped into more abstract concepts which are consistent with the specific theoretical framework. From there, the researcher can create a theoretical narrative and present the subject's personal views in terms of the identified construct. This coding process would be conducted on both channels, similar questions and across other questions.

After analysing both quantitative and qualitative databases separately, the researcher will then compare the results and discuss if they agree or disagree, integrating the two different aspects of the research procedure (Creswell and Creswell, 2017).

RESULTS

The purpose of the current study was to investigate the possible relationship between motivation and vocational decisions of adolescent students who struggle with dyslexia. Moreover, the study also sought to explore possible influences affecting the vocational related decisions of this particular group of students. In order to reach these aims, the researcher had decided on a mixed model research design which consisted of both qualitative and quantitative aspects of the research methods. There were two main instruments, the paper and pen questionnaire and the interview questions.

The questionnaire included closed-ended questions, Likert- scale questions, ranking questions and structured open-ended questions while the interview questions were all open-ended. 41 participants completed the questionnaire and 6 participants contributed to the phone-call interview conducted by the researcher.

Intrinsic and Extrinsic Motivation

Catering to the specific group of subjects, the researcher had designed her own questionnaire with her assigned supervisor's input. Data for Cronbach Alpha was used to analyse the internal consistency of these constructs. The intrinsic motivation subscale consisted of 2 items ($\alpha = 0.606$) and the extrinsic motivation subscale consisted of 2 items ($\alpha = 0.075$). This indicates that both items under the intrinsic motivation subscale are more reliable than that of the extrinsic motivation subscale although both subscales showed positive reliability within respective constructs.

Data collection from the entire group of participants (n=41) shed some light on their intrinsic and extrinsic motivation levels. Across the entire group, most of the participants were highly intrinsically motivated when measured by satisfaction (M=4.415) and enjoyment (M= 4.073). According to the scale, a score of 1 referred to being least motivated and 5 being the most motivated. Hence, this result showed that students with dyslexia are highly intrinsically motivated, suggesting that satisfaction and enjoyment are important aspects that could determine their future career path.

However, the results from the questionnaire were not as straightforward for the Item 2 under this scale, number of working hours. If an individual were to be extrinsically motivated, he would not be keen in a job when required to work for long hours. With a lower average under this scale (M=2.659), participants seemed to be less extrinsically motivated.

One group had chosen 'undecided' about their future career (N=20), while another group had chosen 'decided' about their future career (N=21). Results from t-tests revealed that the Undecided group (M=4.125, SD= 0.604) and the Decided group (M=4.357, SD= 0.824) did not differ significantly on measures of intrinsic motivation, $t(39) = 1.025$, p = n.s. satisfaction, $t(39) = 0.478$, p = n.s., and enjoyment, $t(39) = 1.242$, p = n.s.

Similarly, t-tests analysis also revealed that the Undecided group (M=3.45, SD=.484) and the Decided group (M=3.404, SD= 0.768) did not differ significantly on measures of extrinsic motivation, $t(39) = 0.767$, p = n.s, expected salary, $t(39) = 0.835$, p = n.s., and number of working hours, $t(39) = 0.348$, p = n.s.

Factors affecting decidedness

To further investigate the drive behind an adolescent's decision, the researcher had

identified seven factors and allowed participants to rank them in accordance with importance, with 1 being the most important and 7 being the least importance.

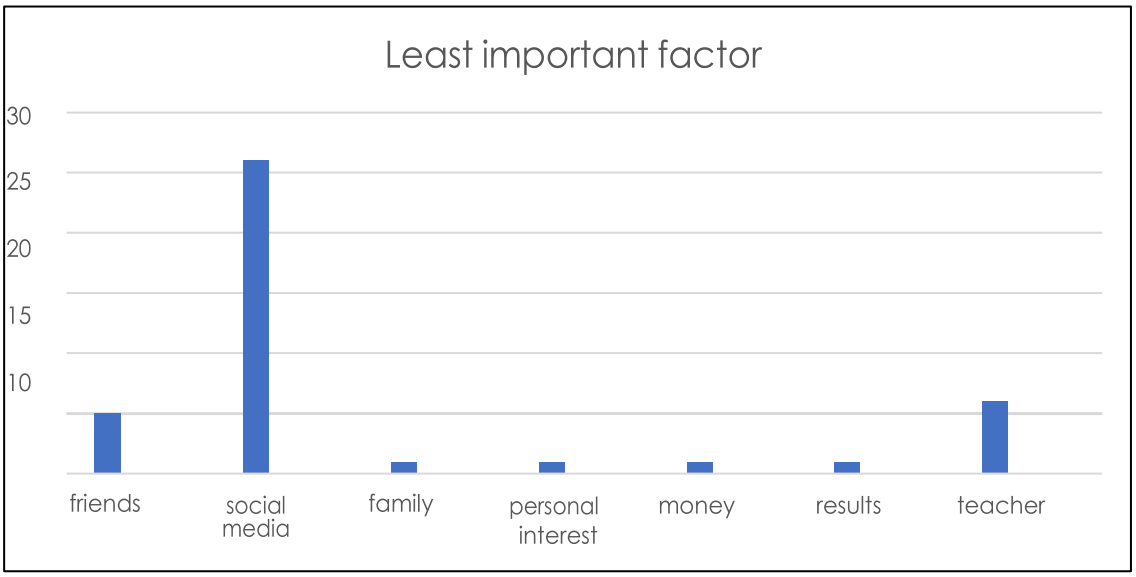

Figure 1. Results of factors ranked as least important

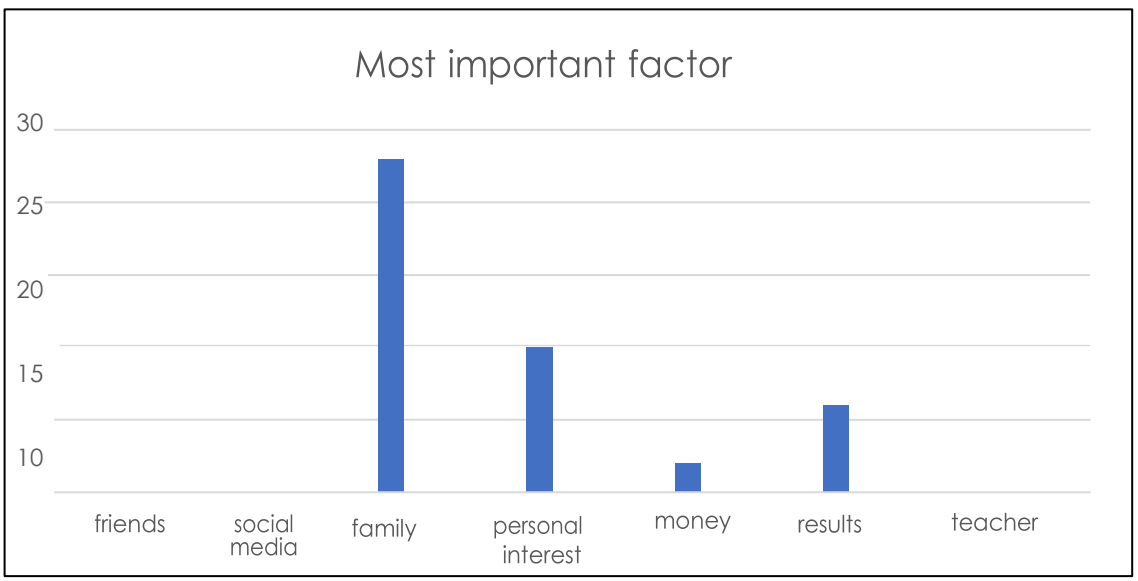

Figure 2. Results of factors ranked as most important

DISCUSSION

The first question addressed in this study was whether motivation influenced decisions in this group of adolescent dyslexics. Both types of motivation, intrinsic and extrinsic were found to be insignificantly related to decision making. This means that motivation type did not predict decision making. However, only two items for each subscale may not be sufficient to gather accurate data of an individual's true reflection. Moreover, questions were counterbalanced to avoid response bias, which may have caused confusion when the statement for extrinsic motivation showed a double negative; *I don't mind that my future job requires me to work for long hours.* Despite this, none of the participants raised this confusion and went ahead with completing the questions on their own.

Assuming accuracy of data collection, the lack of significant differences found across the sample implies that students' vocational decisions are not driven by a single type of motivation. This is consistent with previous research which states that decision-making is a difficult and complicated process (Özkamali, et al, 2014; Sharma, 2014).

Hence it does not agree with the SDT in that decidedness is directly associated with intrinsic motivation (Deci and Ryan, 1985). One possible reason is that these students are both intrinsically and extrinsically motivated to make their decisions, in a balanced manner.

Across the entire group, most participants revealed themselves to be extrinsically motivated when measured by expected salary of a career (M=4.195). This means that most of these students are likely to undertake a career path with the aim of getting a higher pay. However, the importance of salary was also asked during the phone-call interview. Students 1, 2 and 5 shared that salary is *'not very important'*, explaining that their future jobs must include aspects of their interests which they would enjoy. With most interview respondents revealing that salary was not important, they did not show strong congruence with the data from the questionnaire. For Students 4 and 6, on the other hand, salary is *'quite important'* as money is needed to pay bills and purchase items. Interestingly, Student 3 gave a more neutral stand with

> '*I can't answer that question. (It is) important, at the same time not important.' (Student 3)*

However, when probed further, he struggled to express himself:

> *'Er… due to… (pause)… I have no reason for that. I really have no reason.' (Student 3)*

These responses highlighted the complexity of answering questions, and the difficulties of a dyslexic learner in expressing themselves. Essentially, students are aware that money is important but it is not the sole factor, with most students scoring 4 out of 5 for this item.

By contrast, the data on working hours could be the result of lack of understanding of the complex wording in the questionnaire, yielding inaccurate data. However, a low motivation value of this scale could also suggest that students are genuinely neutral in this aspect; the length of working hours does not affect their decision on future vocations. More investigation is warranted to form a clearer indication of the importance of extrinsic motivation for dyslexic students.

Factors influencing decisions

Friends

For many adolescents, the amount of time spent with their peers is increasingly more than others, including family (Jones et al., 2014). This gave rise to the likelihood of students valuing peer opinions (Scalici and Schulz, 2014). Although some researchers found that students with learning differences exhibit social issues that will affect friendships, others had found that dyslexic learners do not depict themselves as low in esteem (Thaler et al., 2010; Undheim and Wichstrom, 2011; Lindeblad et al., 2016). Hence, this led the researcher to believe that these students would value friendship and their opinions as strongly as typical adolescents. Indeed, during the interview, Student 3 shared that

> *'friends give very good advice' (Student 3)*

And Student 5 explained that what,

> *'friends suggested helps to clear your doubts and your own decision in making a better future for you'. (Student 5)*

Other than self-development and growth, another student felt that friends are important for their social needs; Student 4:

> *'sometimes, they will like have the same interest and all (want) to go to the same job together, then you can stay close friends. Not so lonely in a job.' (Student 4)*

These interview citations agreed with previous literature on the importance of the role of friends.

However, collated data revealed that friends are not an important factor for a dyslexic student when making a vocational decision. As seen in Figure 2, the majority of the respondents (27%) ranked friends as the second least important factor. It showed that not all adolescents with dyslexia share the same opinions of friends when deciding on a future career.

Personal Interest

Studies have shown that undergraduates attributed their career choice mainly to personal interest (AnbuSelvan et al., 2013; Liaw et al., 2017; Mishkin et al., 2016). However, other researchers found that interest was only one of the factors, among others, influencing adolescents in their career decisions (Taskinen et al., 2013; Krass and Miller, 2018; Diakogiorgi & Tsiligirian, 2016). In the current study, 25 participants (61%) in the questionnaire ranked personal interest in the two most important factors and in the interviews, 4 out of 6 mentioned personal interests that were noteworthy. Student 5 noted that an individual

> *'should consider taking up courses to learn more in-depth to his own interest' (Student 5),*

because if his job was not in accordance with his interest,

> *'he won't really be very happy with it. And usually… he might have regrets in the future'. (Student 5)*

This excerpt not only showed the strong link between job satisfaction and personal interest, but also the significance of this factor in leading to future regrets. Similarly, Student 2 shared that his future plans,

> '*actually depends on my interest'. (Student 2)*

When comparing salary and interest in vocational decisions, he shared that,

> '*the salary.. is.. not really important because I think the most important is if I enjoy the job I am doing, I would rather do it than to get salary. Because if you give me something that pays more and I don't like to do it, I don't think I would like to work.' (Student 2)*

Student 3 also shared that exploring personal interests can,

> *'help in finding a job that is close to me' and 'something that I may like in the future, so that I don't need to change job'. (Student3)*

Although Student 4 felt that friends were the most determining factor in choosing a job, he added that interest was required to keep the friendship intact,

> '*sometimes we don't have the interest in the same jobs that they have. So they change just like that'. (Student 4)*

Moreover, he had stated clearly that he would not choose a job that he was not interested in. It is evident that these students felt that personal interest is an important factor and helps in motivating them in their jobs in the long run. Hence, it could be concluded that the current research agreed with previous studies that personal interest played a significant role in adolescents' decisions regarding their future careers and having dyslexia did not affect this trend.

Prospective Salary

In this practical world, it is not surprising that individuals are motivated by the salary offered in a job (Schweri and Hartog, 2017; Faberman and of studies that could potentially earn a higher income (Ogoweeo, 2010; Xia, 2016; Strapp et al., 2018), others found that significant number of students were enrolled in specific courses without clear career goals (Kiran and Karaca, 2018). Hence, previous research was rather inconclusive.

From the current research, only 2 participants (0.05%) ranked salary as the most important factor and only 1 participant (0.03%) ranked as the least important factor. The majority of the participants were neutral about this factor, with 29 participants (71%) ranking it from 3 to 5.

This is also reflected from the findings from the interview sessions. While Student 6 acknowledged the indispensability of money, explaining that salary is

> *'quite important to me. Because (it is) used to find your own physical like stuffs all and house', (Student 6)*

Student 5 explained why it is not the most important factor,

> *'salary is not really important to me. It's about our job satisfaction or our own satisfaction to work in our specific job, or career. Usually when we are satisfied with how we work, then you know, usually, the money doesn't really come into play because we don't really need the money, we just like to do the work, help benefit the country or the company itself.*
>
> *And money is just a side thing and it does only benefit us personally, it can help our family support, and it helps to.. er… keep up with the … the world, you know, like buying the latest technology and stuffs like that. But it doesn't really help in a way because* usually, without *our passion towards our career, then the salary… then we just looking at salary itself, it doesn't really… it doesn't bring the … it just gives us a doubt whether we really like our job or not. Usually like that. Sometimes we have to like what we do.' (Student 5)*

It is clearly expressed in this extract that money is one of the many factors but is not the most important. Despite its indispensable nature, students felt that what motivates them in the long run is not money. Thus, this is congruent to the finding from the questionnaire, as well as previous research.

Academic Results

Many studies have established the strong positive link between academic performance and career opportunities (Negru-Subtirica and Pop, 2016; Beigi et al., 2018; Kool et al., 2016; Sawitri and Dewi, 2015). However, dyslexic students are disadvantaged due to their difficulties in reading (Pluck, 2018). Hence, this might affect their thoughts about basing their future career plans on academic achievements. For this matter, Student 5 related that,

> *'in terms of results, like… if imagine that… erm… we were struggling in our Secondary school education, we weren't really doing well, then it comes to tertiary education, everything like.. every project that we do in, er… we keep flunking or … really don't, we just barely pass our grades. It doesn't really help in showing that we are prepared to face the future, like the career that we want to pursue. And I think this will affect us in a way like it affects our own passion in a way because like… can I really … then you will have some doubts like can I really do it?' (Student 5)*

From this, it is evident that academic results affected the self-esteem of dyslexic learners by creating self- doubts. This also highlights the widely accepted relationship between academic performance and their future plans.

The data collected from the questionnaire indicated that most participants (9 of 41, 22%) ranked the importance of academic results in deciding on a future career as neutral (4 of 7). There is a smaller range and wider spread in results here, although similar to the findings for the salary factor. Unlike some other factors, this reflects that students had very individual thoughts and did not show any observable trend or patterns. Such differing data was also received from the interview sessions. Student 1 felt that 'results' is the most important factor affecting his vocational decision. However, he explained that results will determine the salary scale. Hence, it is rather clear that salary was the main important factor for him. Similarly, Student 3 mentioned that results is the most important factor, but added that

> *'study is more important then you can find your .. find a task .. your best job for personal interest'. (Student 3)*

This shows that interest was more important to him. Putting them together, these excerpts explained the complexity of the ranking question as this factor, results, is closely intertwined with other factors.

Teachers

Other than academic performance, teachers represent another school- related factor that could potentially influence an adolescent student's vocational decision. Teachers not only conduct programmes in career exploration, but also emphasise the importance of scoring well in examinations which could lead to better career opportunities (MOE, 2012; Negru-Subtirica and Pop, 2016; Sawitri and Dewi, 2015). They provide guidance and directions towards future career choices. In the current study, the researcher sought to explore the influence of teachers on adolescents with dyslexia.

Only 2 students in the interviews explicitly discussed the role of teachers. According to Student 5, while other people in his life such as teachers, friends and family members could provide suggestions, his future career path is ultimately his own decision. These suggestions only served as an assurance to create a clearer picture of his future. Hence, he acknowledged the roles of these factors but did not feel that teachers (or others) play an important role. Student 3 felt that school teachers, among other factors, affected him the least in making a vocational decision. He noted that despite having the same teachers throughout the years, school teachers did not know him well and,

> *'some comments are negative some are positive, it depends on the perspectives of the viewer'. (Student 3)*

Both students acknowledged that school teachers provided comments and suggestions to guide them in their future but they are not the most important factor in their decisions.

The compiled data from the questionnaire revealed a fairly even spread of ranking choices when asked about the importance of teachers in influencing career choices, with no obvious clusters or trends observed. This means that some students found that teachers represent a strong influence while others found them a weak influence. Hence, similar to school results, it shows that individual students had different thoughts on this factor.

Social Media

With the current technological advances and reliance on media and the internet, it was expected that all adolescents would find social media a strong influence on various aspects of their lives. However, 26 participants (63%) found social media the least important factor in vocational decision making by ranking it 7th out of 7 on the questionnaire. This finding contradicts previous research which has established the trend of dependence and reliance on the internet and media for social and information seeking (El Asam et al., 2018; Casaló and Escario, 2018; Mihara et al., 2016; Li et al., 2018; Seok et al., 2018).

None of the 41 participants ranked social media as the most important influencing factor. There was a concentrated cluster at the bottom of the scale, all 41 responses ranked this factor 4th or below (out of 7). This trend was highly supported by the results from the interview sessions.

Social media as the least important factor on vocational decision making was highlighted by a few students in the interview. Students 4 and 6 shared that they seldom used, or do not use social media. This lack of exposure to social media is consequently a weak influence on their vocational choices.

Additionally, this also proved to be different from the general assumption that adolescents are currently highly influenced by the social media and internet. This highlights that overgeneralising from trends could be a mistake.

Another noteworthy point was brought up by Student 2, who shared that,

> *'social media could .. be fake news and .. they are always in the internet, they don't really know your personal interest … So they wont affect me at all.' (Student 2)*

This implies that the information on the internet and social media is too generic, may not be trusted and is not personalised, making it less applicable and relatable according to individual needs. It also highlights the importance of personal interest and further proved the individuality of students. This was also supported by Student 1,

> *'people use social media to see what people say about, about some jobs, but, I don't care about such stuffs'. (Student 1)*

Interestingly, Student 5, who had the longest interview session, did not mention the influence of social media at all, perhaps because other factors had stronger impact than this. Essentially, collated data from the current study contradicts previous trends and research and suggests that social media was a weak influence on vocational decisions for this particular group of students.

Parents

A frequency distribution analysis revealed that the majority of the participants, 23 of 41 (56%), felt that family were the most important factor affecting their decisions regarding their future by ranking the factor as 1st of 7 (see Figure 1). This finding is consistent with previous literature, stating that family members have a strong influence in adolescence on vocational decision- making (Katz et al., 2018; Lim & You, 2017; Sharma, 2014; Slaten and Baskin, 2014; Olle and Fouad, 2014; Metheny and McWhirter, 2013; Pappas and Kounenou, 2011). There was also a noticeable cluster of participants who ranked family as their top 3 in importance. At the other extreme, there was only 1 participant (0.03%)

who ranked family as the least important factor. Perhaps this response was from Student 5, who noted during the interview that his parents were the least important factor for him.

This observed trend was supported by the data gathered from the interview sessions. A few students noted that family or parents were the most important factor in influencing their decisions about future careers. Student 5 explained that he would consider points such as whether the job benefits his family in terms of financial support. Despite acknowledging the impact of his future on his family, he stated that parents would affect him the least in his vocational decision. Student 5 explained that,

> *'I think parents doesn't really block our passion or helps to change our own decisions in a way. They will be…they will be hundred percent…they will always be supporting our backs because usually they will just say to pursue your passion instead of not doing anything.' (Student 5)*

Although this means that family members were his least important factor, it was explained in a positive manner and this suggests that there is trust between his parents and him and thus he had the freedom to choose a career of his choice, with full parental support. It did not imply that this was not an important factor, as could have been gathered from the quantitative data. In another note, Student 2 explained that,

> *'because they will be supporting me and then they do equip me with confidence to either continue or think about it.' (Student 2)*

This suggests that adolescents do look up to their parents for emotional support as well as skills and information, thus being regarded as most important. Students 3 and 6 also shared similar ideas, that,

> *'some of them have more knowledge than you, and you would want to listen to them' and that 'they give you great advice'. (Student 3 and 6)*

In essence, students interviewed had explained that they regard parents and family members as important factors affecting their decisions because of their support, knowledge and trust.

While findings from previous researchers also indicated the high importance of peer relationships and friendship during the adolescent stage (Jones et al., 2014; Scalici and Schulz, 2014), this was not found in the current research.

There were no participants who found their peers the most important factor affecting their vocational decision. Similarly the factor on social media suggests that this specific group of students do not tend to follow generalised trends. Both factors are social aspects of the students' personal lives, which led the researcher to believe that this could

reflect overall low self-esteem, possibly related to their diagnosis of dyslexia. However, more investigations are warranted before establishing this relationship further.

Interview Session

According to the Self-Determination Theory (SDT), decision is driven by motivation and an individual is said to be motivated if he has met the three basic needs, competence, autonomy and relatedness (Deci and Ryan, 1985). Although the relation between decidedness and motivation was not established from the quantitative data, the information collected from the verbal interviews could offer some insights.

Of 6 participants interviewed, 3 of them (50%) expressed clear directions in their future career plans. To further examine the motivation behind such strong decidedness, the researcher looked at specific indications of the three needs. Student 2 expressed his interest in pastry and bakery, he has been,

> *'focusing on cooking and making designs' (Student 2)*

and this was his interest. This implied that he has acquired some competence in the field and had the autonomy to choose according to his personal interest. In terms of relatedness, he shared that parents would affect his decisions most

> *'because they will be supporting me and then they do equip me with confidence to either continue or think about it'. (Student 2)*

Student 4 shared that he had shortlisted three specific fields of studies to choose from, and his ultimate decision depends on

> *'which one more fun, not so hard'. (Student 4)*

An element of fun suggests personal preference and autonomy whereas being difficult to manage suggests competence level. In essence, he has control over which field he chose and it should be tasks that he is competent in. Additionally, he emphasised the role of friendship in his career decision making, that he might choose a career if he has friends in so that he,

> *'will not feel so lonely' (Student 4)*

and would ask his friends for advice in directions. This implies his high need of relatedness. Student 5 has decided on pursuing electrical engineering. He felt that he has prepared for this by being competent in related subjects in school, such as Maths and Science. This was his own decision stemming from his personal interest and passion in technology. More importantly, he felt that his parents would always support him in any

decisions he makes because they will not,

> '*block our passion or helps to change our own decisions in a way'. (Student 5)*

These makes it evident that his motivation was clearly supported by having met all three basic needs, competence, relatedness and autonomy.

For the remaining three participants, they felt that it was important to start planning ahead but had no plans or directions yet. Two of them explained that receiving their results at the end of the year would help in determining their eligible courses to study, and thus a future career direction. Hence, it suggests that a lack of competence acted as a barrier towards their decidedness. Interestingly, Student 5 felt that his results on the stronger subjects would help in providing a direction. He explained that,

> *'looking at subjects that he is excelling in, he would likely consider maybe taking up like other courses' (Student 5)*

when given a scenario of a student needing advice. Instead of seeing competence as a restrictive factor limiting choices of courses, Student 5 looked at it in a positive note. This reflects differences in self-esteem and attitudes.

However, there is insufficient information to establish a concrete link between these constructs and decidedness. Referring back to the current study's aim of investigating the possible relation between motivation and decidedness, the data from these interviews implies that students who had decided on their future plans were highly motivated. Although it did not provide specific aspects of motivation, intrinsic or extrinsic, it supports the SDT that decisions are driven by motivation through meeting basic needs (Deci and Ryan, 1985).

Factors affecting vocational decisions that were identified by the researcher included friends, social media, family, personal interest, money, results and teacher. Having discussed these individually in the previous section, the following part aims to answer the next research question, what other influences affect vocational decision for this particular group of students?

When verbally asked about other concerns they had regarding choosing a potential career, students shared various points which provided rich and meaningful data for the current research. Student 2 highlighted the point on safety, explaining that

> *'because when doing jobs right, there will be always accidents, so I always make sure that my working environment is in a safe environment, not too cram, not too messy. So that in order for me to do my job, I don't have to injure myself and go hospital and such'. (Student 2)*

Student 4 spoke about the working environment, that he

> *'don't want it to be too hot. If not, I can't focus'. (Student 4)*

Student 6 expressed his concern about distance from home,

> *'because I am a lazy people who don't like to travel to some place'* [and the job location must be] *'not too far from my house'. (Student 6)*

Offering a different perspective, Student 5 spoke about the job objectives,

> *'like what kind of objectives we have to meet? Does it really fit our passion? Does it fit our own interest? And then we will, you know, think about it and then eventually will select this job as our own passion' (Student 5)*

so that individuals who are working can create 'meaningful experiences' on a daily basis at work. In essence, other concerns shared by these participants, other than Student 5, fall into a main category of environmental concerns. This theme was derived from three main codes; working condition, distance from home and safety. Although this theme was not identified by the researcher prior to the study, it revealed an emerging theme that could have been explored further.

Another interesting theme which emerged from the coding process was knowledge and skills. Firstly, all 6 participants agreed that school programmes, such as class activities and excursions to various Polytechnics and ITEs, helped to expose them to courses of potential interest. For example, Student 2 shared that,

> *'my school has er, actually asked us to go the internet, to check on what kind of course are there and what they will teach you and after that, after you graduate, what kind of job scope you will be in'. (Student 2)*

This acknowledged that his school has engaged him in preparations for the future. Similarly, Student 4 shared that he had picked up interest in 3D modelling course from the school visits when he was given opportunities to see projects being done on the spot. Student 6 also found these school efforts useful, as

> '*how it works and this all.' (Student 6)*

In terms of usefulness of school programmes, Student 5 provided an in-depth view,

> *'they do help in like suggesting what kind of career that you would like to pursue in the future. And the different aspects on what kind of things you should prepare for this specific course or career that you are looking at from the polytechnics' perspective.*

> *Usually our schools, schools like the Secondary that I am actually in, usually helps to not focus only on studies but actually spark the light within us like what kind of jobs do you like to pursue. And like to really focus on what … to focus on that goals specifically, so that you know, our own thoughts and mind is more fixated on the goal and rather like, we don't flunk or do anything else other than think about how can we reach that goal faster or even further … to go beyond the goal.' (Student 5)*

He found that school efforts not only exposed him to various courses that were available, but also encouraged him to discover his personal goals. This implies that he had formed personal connections with information gathered and identified with them. Putting these together, it seemed to suggest that students acquired knowledge and skills from their schools regarding future plans.

In fact, there could have been too much emphasis on career guidance from the school's perspective that led many students to feel that academic performance would be the determining factor in their future career path.

The point on skills and knowledge was also brought up by Student 5 who felt that primary and secondary education provided the foundation in the working world,

> '*interviewers will usually look at based on results and it does matter in terms of our own knowledge that results actually have to be important in a way because every time if they see a gradual decline they wouldn't want someone like me to actually be part of the company. They want someone who can actually bring up the company's name or benefit the company in the same time'. (Student 5)*

This led to the understanding that academic performance allowed employers to pick those who possessed better skills and knowledge as a form of being prepared for the job. Most of the participants mentioned the use of internet, while Students 3 and 6 shared that family members could offer great advice and knowledge. Generally, these students shared various sources of getting required knowledge and skills but explained that these are important in making a vocational decision.

In summary, these coded themes extracted from the interview sessions provided a fresh angle to view the whole issue of vocational decisions, as depicted in Figure 3.

From the data analysis, the researcher found that understanding motivation in terms of intrinsic and extrinsic motivation was too broad. Students tend to discuss and share more about specific and clear aspects such as interest/passion, academic results and personal goals. Although these seemed to fall under intrinsic motivation, information is lacking to ascertain that these students were intrinsically motivated.

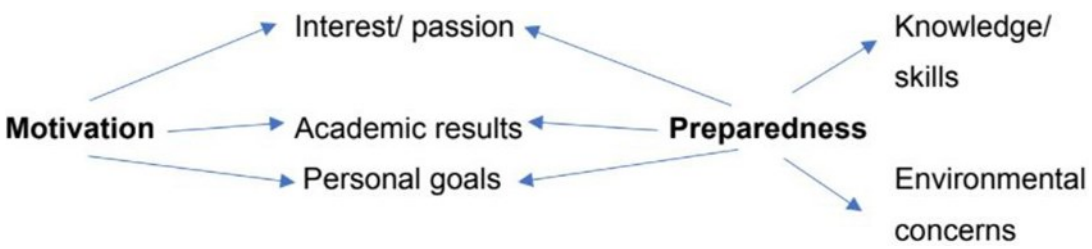

Figure 3. Relation and themes gathered from interview sessions

More importantly, rather than looking at factors that could influence their decisions, the collated themes could be put together to form a broad theme on preparedness. Students seemed to be more or less prepared for future vocations according to their relevant knowledge and skills, the working environment, personal interest, academic performance, as well as personal goals. Of these, personal interest, academic performance and personal goals helped to motivate them towards preparation for the vocational decisions. Hence, placing students according to the two types of motivation seemed too broad and the 7 identified factors were too narrow in understanding their decision-making process.

CONCLUSION AND IMPLICATIONS

Essentially, the practitioners supporting career guidance should be more alert to these various personal differences than to adopt one strategy. This means that instead of focusing on finding a general pattern for the majority or to group the minority, future researchers should put in more attention in investigating the vast differences in these students. Decidedness of a dyslexic adolescent on his future vocation largely depends individual motivation and preparedness.

LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

The current research had some limitations. Firstly, it involved a small sample size because the recruitment was subjected to both parental and student consent. On top of this, the follow-up interview was made optional and received an even smaller number of signed consents. Hence, the results from the study has limitations on its generalisability.

Secondly, the background of the study was based on local context, with students attending local schools and factors that were localised such as school teachers and academic performance. The discussion and yielded results may not be applicable across various countries and nations as education systems differ. Lastly, the factors influencing the vocational decisions of these students were not exhaustive. Although the researcher had identified some from past literature and extracted some from the verbal interviews,

there could be other factors that were missed out. One of the six participants interviewed took a significantly longer time to share his thoughts and provided rich and meaningful data for the researcher, while some others were rather unresponsive and provided very short one-worded responses. Hence, this could have skewed the data collected.

Generally, the research had provided a few important implications. School programmes targeting career guidance and courses of studies were helpful in exposing them to plan ahead. However, not all students had a clear direction despite this. More research is warranted to investigate the underlying reasons and effectiveness of these efforts. Secondly, researchers working with dyslexic participants need to be mindful of the complexity of questions given, as well as openness to receive differing thoughts. For example, a student who stated that parents were his least important factor influencing his thoughts. Instead of implying that the thoughts of his parents did not matter at all, he explained that he had full trust in his parental support of his desired choice. Lastly, investigations in career guidance of dyslexic students should understand that these students are very individual and motivated in different ways. Despite the researcher's aim to find general patterns of their thoughts, the data revealed that they generally do not follow patterns.

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APPENDIX 1

Questionnaire for Research Study

This set of questions is to allow me to understand your future plans. Please be assured that thereare no right or wrong answers. I appreciate your honest responses in the following questions.

1. Please tick the box that describes you best:

☐ I **have decided** on my future career and I **know** which course I should take aftergraduating from my Secondary School.

My future course/ job is _____

☐ I **have not decided** about my future career and I **do not know** which course I should take after graduating from my Secondary School.

2. On a scale of 1-5, circle the number that describes you best:

QUESTION	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
A. It is important that my future job pays me well.	1	2	3	4	5
B. It is important that my future job makes me feel satisfied.	1	2	3	4	5
C. I don't mind if my future job is one that I don't enjoy.	1	2	3	4	5
D. I don't mind that my future job requires me to work for long hours.	1	2	3	4	5

3. Sometimes our decisions for the future can be affected by others. How important do you view these seven factors?

Order them in the list below by writing ONE number in each square **1** being the most important, while **7** being the least important factor.`

	FRIENDS	My friends can give good advice because they understand me.
	SOCIAL MEDIA	The information I get from social media such as Facebook and Instagram can be useful.
	FAMILY	I believe I can achieve with my family's strong support.
	PERSONAL INTEREST	I will only choose a career if I am interested in it.
	MONEY	The best job is the one which pays me well.
	MY RESULTS	The course and future career I choose depends on my resultsfrom my exams.
	MY TEACHER	I am sure my teacher gives the best advice for the course or career I should take.

The **most important** factor I have chosen is _____ because

_____

The **least important** factor I have chosen is _____ because

_____

Other than those in the list above, are there any other factors that will affect your decision when choosing a future career path? Write and explain. You may write more than one factor.

_____

_____

_____