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# The Crisis of Disengagement: A discussion on motivation change and maintenance across the primary-secondary school transition

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**Abstract**

The transition from primary to secondary education signals a process of developing and maturing physically and mentally, but this 'rite of passage' for some young adolescents is often associated with a drifting interest in school education. This phenomenon, caused by a decreased motivation for learning, has been observed by many relevant studies. This article adopts the psychological approach to study this long-lasting educational phenomenon while employing 'intrinsic-extrinsic motivation theory' and 'goal theory' to investigate the gap between primary and secondary schools as well as what possible pedagogies there are to maintain or stimulate the pupils' motivation. An intrinsically motivated student acquires knowledge out of curiosity and interest, and they are willing to face the more difficult challenges that secondary education provides. As identified in the conclusion, the creation of a more integral educational system can alleviate the decrease in motivation while pupils undergo this period. A more amiable educational environment can be maintained that enhances the pupils' self-concept, learning efficacy, and a sense of volition as well as self-determination to circumvent this transitional crisis.

**Keywords:** motivation, intrinsic-extrinsic motivation theory, goal theory, self-conception, self-efficacy

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# La Crisis de la Desconexión: Una Discusión sobre la Motivación en la Transición entre la Primaria y la Secundaria

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**Resumen**

La transición de primaria a secundaria es un proceso de desarrollo y madurez física y mental que para algunos adolescentes se presenta como un "rito de paso" que se asocia a menudo con una pérdida de sentido en relación a la educación escolar. Este fenómeno, causado por la motivación decreciente para el aprendizaje, ha sido destacado en muchos estudios relevantes. Este artículo adopta la perspectiva psicológica sobre los fenómenos educativos de larga trayectoria empleando la "teoría de la motivación intrínseca-extrínseca" y la "teoría de la motivación" para investigar la brecha existente entre escuelas de primaria y de secundaria así como las posibles pedagogías útiles para mantener o estimular la motivación del alumnado. Un estudiante motivado intrínsecamente adquiere el conocimiento no por la curiosidad y el interés, y miran de afrontar los retos más difíciles que la educación secundaria les depara. Como se identifica en la conclusión, la creación de un sistema educativo más integral puede aliviar el decrecimiento de la motivación mientras los alumnos se encuentran en dicho periodo. Un ambiente educativo más afable puede mantener el auto-concepto de los estudiantes, la eficacia en el aprendizaje, y el sentido de voluntad así como la auto-determinación para evadir cualquier crisis en la transición.

**Palabras clave:** motivación, teoría de la motivación intrínseca-extrínseca, teoría de la motivación, auto-concepción, auto-eficacia

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From childhood to adulthood, this transitional period is second only to the rate of growth occurring during infancy (Petersen & Taylor, 1980). Unlike infants, young adolescents undergo the dramatic change with a developed consciousness and thus, biological change and psychological conditions have a great influence on behaviour. The hormone system causes instability and this critical phase is characterised as a time of storm (Boxer, Tobin-Richars & Petersen, 1983). However, physical and psychological crises are not the only unstable factors which adolescents have to face. After proceeding to secondary school, a brand new school climate and peer culture is ahead of them. Simmons, Blyth, Van Cleave, and Bush (1979) pointed out that the transition to a new environment sometimes is more devastating for early adolescents when they are simultaneously under pubertal change. As is proven by some research (Anderman & Midgley, 1997; Doddington, Flutter & Rudduck, 1999; Harter, Whitesell & Kowalski, 1992; Warburton & Spray, 2008; Zanobini & Usai, 2002), a downturn in learning motivation and incremental disengagement from school are discernible during the transition from primary to secondary education.

To elaborate the fluctuation of motivation, Observational Research and Classroom Learning Evaluation (ORACLE) tested pupils' enjoyment, motivation and achievement across the transition, finding that motivation reaches its peak in the first term after transition but declined to a level lower than that prior to transfer in primary school (Delamont & Galton, 1986; Galton & Willcocks, 1983). In the same survey, this overall deteriorating phenomenon happened to 40% of pupils and was attributed to environment change and curriculum discontinuity (Galton, Morrison & Pell, 2000). The later related researches also identified an identical result (Rainer & Cropley, 2013). Importantly, a study conducted by Roderick (1992) connected the

relationship between lower motivation and learning outcome and concluded that those students whose grades declined the most after the transition were more likely to drop out of school later. According to the above existing research, most pupils encountered the transition between the ages of 11 and 13, depending on different educational systems across countries. Therefore, this article will focus on this age group that proceeds from primary/elementary education to the next stage of schooling, either secondary, junior high or middle school according to the term used in different settings. Having identified the gap between primary and secondary school, this article will employ the intrinsic-extrinsic motivation theory and goal theory to determine the possible pedagogies that can maintain or stimulate pupils' motivation and the learning strategies that have been respectively adopted by pupils with higher and lower motivation. Before that, this article will first explore the interplay between ability beliefs, self-concept, self-efficacy and motivation. This article will draw upon a large body of literature investigating the decrease of each across the transition as evidence of motivation decline and provide advice to the education authority, schools and teachers to craft a more promising environment for pupils to maintain or boost the engagement of learning. However, it is noted that the analysis of pupils' psychological change during the transition should not be regarded as being universal when it is applied to evaluate a specific region or country due to social, cultural and educational variations.

## Is motivation deterioration a necessary 'rite of passage'?

Does the motivation decline occur just during the transition? Or is it a cumulative effect and shown more conspicuously across the primary-secondary transition? Nicholls and Miller (1984) found that 5- and 6-year olds regard effort and ability as positively related, but in contrast, many of

the 10- to 13-year olds viewed them as inversely related, which means that younger students were more likely to believe that ability is changed through efforts. Dweck and her colleagues (Dweck & Elliot, 1983; Dweck & Leggett, 1988) also conducted research on American elementary school students' beliefs about their intelligence and the result indicated that older children had stronger entity views than did younger ones. Those researchers used both questionnaires and interview methods to investigate elementary school students and found that pupils gradually come to believe that ability is less malleable and manageable with grades. In other words, after a series of failures, they start to convince themselves that the failure consists in the lack of ability and this recurrent thought undermines their motivation, which denotes the reciprocal relationship between ability beliefs and motivation. What is worse, when they go to secondary school, they find that the ability is stressed more than in primary school (Freedman-Doan, Wigfield, Eccles, Blumenfeld, Arbreto & Harold, 2000; Zanobini & Usai, 2002). In addition, a number of literature data (Harter, 1981a; Marsh, 1989; Wigfield *et al*., 1997) has further identified that motivation, positive attitudes toward school and ability beliefs demonstrate a substantial decrease especially during primary-secondary transition. Therefore, it can be clarified that the decline of motivation occurs from the late primary stage but plummets across the transition.

**Motivation and self-concept**

To broaden the scope from ability beliefs to social cognitive theories, self-concept and self-efficacy are the two other indicators used to observe the motivation fluctuation during the transition. Some studies use the terms self-concept, self-esteem, self-efficacy interchangeably (Byrne, 1996). The general agreement is that self-concept is a multidimensional and multifaceted construct, including cognitive, affective, and behavioural

aspects. In other words, self-concept is a personal description and evaluation of the pupils' strengths and weaknesses (Harter, 1985). Different from self-concept, Bandura (1986, p.168) describes self-efficacy as '*capability to attain designated types of performances'* and this term is a context-specific assessment of competence concerning a specific task, which is the major distinction from self-concept's more global and less context-dependent traits (Pajares & Miller, 1994). A number of other studies identified consistently that pupils' self-concepts influence their achievement motivation because of their effect on their effort, persistence and anxiety (Nicholls, 1984; Covington & Omelich, 1981; Elliott & Dweck, 1988). A primary-secondary transitional study by Wigfield, Eccles, MacIver, Reuman, and Midgley (1991) investigated pupils' domain-specific self-concept change via interview. They found a substantial decrease after the transition in students' English self-concept, but merely a trend for maths self-concept. Besides, boys' and girls' self-concepts of ability changed across the subjects but the magnitude of the difference did not change after the transition. As traditional stereotype to gender differences, girls' mathematics self-concept becomes more negative and lower than boys' after transition. In contrast, girls' attitude toward English remains more positive than boys' before and after transition.

**Motivation and self-efficacy**

Self-efficacy bears on an individual's judgments of their capabilities to solve a specific problem or perform a task. It can be argued that self-efficacy and motivation have a strong correspondence, but the published literature about their relationship is few, limited and mixed (Anderman & Maehr, 1994). Midgley, Anderman and Hicks (1995) administered a questionnaire-based and non-subject-specific survey to investigate how self-efficacy changes during the transition. The student sample consisted of 291 elementary and

678 middle school students and male and female students were equally represented. The researchers hypothesised that students' self-efficacy would decrease, but surprisingly the increased self-efficacy was shown in the result. The researchers inferred that this is because the academic work in middle schools requires higher thinking, more learning strategies and yet less effort, compared to that in elementary school, so the lighter workload makes them feel more capable of handling the school work. In addition, a study by Gorwood (1994) indicated that some pupils regarded the contents of mathematics easier than before because they had reached national curriculum level 5 in primary schools but the secondary school started from level 3 in the UK. Therefore, the research unveils some problematic discontinuities underlying the English national curriculum and highlights that the liaison between primary and secondary schools was weak even after the implementation of the national curriculum.

Back to the reasons why there was no substantial drop in self-efficacy, Doddington, Flutter and Rudduck (1999) moving up to secondary level denotes that they are on the way to adulthood and the expectation of autonomy and self-determination toward secondary schools implies that they are more capable in many aspects, contributing to over-confidence. Specifically, in terms of research methods, Bandura (1986, p. 170) cautioned that '*self-efficacy must be specifically rather than globally assessed*'. Therefore, there could be a different result if it was conducted in terms of subject matter domains like English and mathematics.

Although the pattern of declines in self-efficacy is not always found along with a deterioration in motivation (Harter, 1982), self-efficacy, self-concept and motivation are indeed interconnected as can been seen when referring to other relative self-efficacy studies (Pajares, 2002; Pajares & Miller, 1994; Wigfield, Eccles, MacIver, Reuman & Midgley, 1991; Wigfield, Eccles, & Pintrich, 1996). For example, in research by Wigfield, Eccles, and Pintrich (1996), it was reported that boys and girls demonstrate

equal confidence in mathematic ability during the elementary years, but by middle school, boys showed higher self-efficacy than do girls in mathematics, which corresponds to the same result from the self-concept survey (Wigfield *et al.*, 1991). After discussing how ability beliefs, self-concept, self-efficacy and motivation affect each other and also decrease during the transition, the next section will take social-contextual factors into consideration and elaborate the interaction and causality between class/school culture and personal motivation shift.

## What are the differences of contextual factors between primary and secondary school?

Primary and secondary school environments differ in structure. In contrast with primary school, in secondary schools, subject-specific teachers offer pupils the opportunity to learn to negotiate, communicate and adjust to different kinds of teachers. Besides, with more experience of moving from one classroom to another for different subjects and encountering more teachers and senior and junior peers, they are more affected by the whole school culture and climate than they were in primary school (Harter, Whitesell & Kowalski, 1992). According to a survey conducted in Dundee by Zeedyk, Gallacher, Henderson, Hope, Husband and Lindsay (2003), the interviewed respondents, including pupils, parents and teachers, thought that secondary schools have a heavier academic workload and place more stress on peer relationships. When primary pupils were asked about their expectations from secondary level, the greater value of academic skills and self-empowerment are the major two elements they anticipated.

Obviously, the transition process has drawn the attention of primary school pupils, parents, teachers and educational authorities. Some ‘transition support programmes’ have been launched. Future secondary school pupils

have the chance to visit the secondary school they will be attending, meet new teachers, and know the new campus, which tends to help pupils adapt to the new place in advance and modify their anticipation for better adjustment. However, a series of studies indicated that students' motivation markedly declines after transition (Anderman & Midgley, 1997; Doddington, Flutter & Rudduck, 1999; Harter, Whitesell & Kowalski, 1992; Warburton & Spray, 2008; Zanobini & Usai, 2002). The central and most important task for the transition support project should not be to try to fit primary pupils into this environment which is known to threaten their motivation, but instead, should be to re-investigate how secondary schools should change in order to maintain pupils' motivation for future study. The following section will display the difference between primary and secondary schools and provide advice for motivation maintenance.

**Intrinsic and extrinsic motivation shift during the transition**

The decline in motivation implies the attenuation of intrinsic motivation. The social context can create either an intrinsic or extrinsic motivationally oriented environment and the constructed atmosphere has a great influence on the learners. An intrinsically motivated person has a full sense of volition and acquires knowledge for its own sake, which characterises a high-quality learner with higher self-efficacy, conceptual understanding ability and proactive pursuit of personal growth (Deci, Vallerand, Pelletier & Ryan, 1991). The environment gives them 'choices' instead of regulations and controls. In contrast, extrinsically motivated people link learning to the pursuit of prizes and praise or the avoidance of penalty and embarrassment; thus, they pay more attention to the consequences than the essence of the study. The extrinsic motivational context seeks to use external rewards or punishments to maintain learners' motivation but its nature of more control and less autonomy diminishes learners' self-worth and interests.

Harter (1981b) utilised a self-report scale to observe 3000 pupils ranging from 3rd grade to 9th grade to test their intrinsic motivation shift. A general decline was indicated in the result, changing from a predominantly intrinsic to a more extrinsic motivational orientation. Particularly, a substantial shift was found between 6th grade and 7th grade. To explain further this trend, the context of primary and secondary schools should be juxtaposed.

After entering secondary level, pupils desire more opportunities and empowerment from school for self-determination because they perceive themselves in a new stage heading for adulthood. However, a mismatch exists between the given environment and pupils' expectation (Eccles, Wigfield, Midgley, Reuman, Iver & Feldlaufer, 1993). The secondary school ethos does not correspond to the incremental sense of autonomy. Because of stricter school regulations, a more rigid national curriculum and more distant teacher-student relationship in contrast to primary school system, students have, on the contrary, fewer chances to make their own decisions and express their self-determination, which suppresses their school engagement and lessens the positive attitude toward school (Anderman & Maehr, 1994). Deci *et al*. (1991) also indicated that 'external regulations', including the offer of a reward and the threat of a punishment are detrimental to intrinsic motivation since material rewards and constraints present the least self-determined form of extrinsic motivation.

Meanwhile, students perceive teachers as more controlling after transition (Harter, Whitesell, & Kowalski, 1992). Increasing control not only deprives pupils of possible choices, but also distances the relationship between teachers and students, which implies another cause of motivation decline. Midgley, Feldlaufer and Eccles (1989) conducted a study on students' perceptions of the supportiveness of their teachers before and after the transition to junior high school. This two year longitudinal research of 1301 pupils demonstrated that primary school teachers paid more attention to each student which was beneficial to closer teacher-student relationships and

engendered a supportive environment but after transition, mathematics teachers were less supportive to their learning. The result of the Teacher Support scale concluded that the quality of relationship has a positive correlation with motivation and the value which pupils place on maths, especially in the case of lower achieving students. In other words, the distant relationship in junior high school reduces pupils' motivation and the value of mathematics to them decreases accordingly.

However, subsequent to this study, pupils' statement about 'the less supportiveness of secondary school teachers' needs to be examined more closely. This thought among pupils implies that sufficient attention and support from teachers are what early adolescents need, and therefore, the present secondary school pastoral system or the role of form teacher should be re-evaluated given that better teacher-student relationship can improve motivation. It is understandable that pupils perceive secondary teachers to be less supportive because the specific-subject teaching routine reduces the average time allotment and attention pupils receive from each teacher. This study poses a question: is the size of a class or a school another crucial reason for motivation deterioration at secondary education level? The construction and maintenance of a warm, friendly, supportive environment is what educational practitioners are supposed to pursue.

It is also important to point out the relationship between intrinsic and extrinsic motivation. In early research, both motivations seem to be antithetical and antagonistic. However, another study (Ryan & Connell, 1989) suggests that the different types of extrinsic motivation can be integrated into intrinsic motivation, a process which is called 'internalisation' and this process can bridge the gap between the intrinsic and extrinsic dichotomy. On the assumption that everyone may become inherently motivated to absorb new information or engage in previously uninteresting activities, 'internalisation' is a motivated process through which learners transfer regulation by external contingencies into regulation

by internal processes (Schafer, 1968). For example, a student who is not interested in the British political regime finds it hard to learn about it intrinsically. If some extrinsic contingencies intervene such as peers' positive feedback or praise from teachers, 'internalisation' will start to transform the contingency into an intrinsic motivational process. With the incremental self-worth constructed from feedback and compliments, pupils discover the enjoyment of learning about the political regime and link their positive attitude with it. Afterwards, the motivation of the student's study of political regime becomes internal and external contingencies are no longer necessary (Ryan & Connell, 1989).

Concerning the application of intrinsic motivation to practical teaching, positive feedback is found beneficial but this happens only when the feedback is accompanied by support for autonomy, which can fuel pupils' perceived competence. In contrast, feedback with negative remarks makes pupils feel controlled and lowers their self-perception and efficacy. As for the other two 'external events' prevailingly adopted by secondary school teachers – rewards (money, cards) and personal/group competition, rewards are likely to stimulate temporarily pupils' interest and grab their concentration in a short time, but when the 'reinforcement' terminates, they tend to lose attention and engagement (Deci *et al.,* 1991). That is to say that their external motivation fails to be internalised or integrated into intrinsic motivation. The second of the 'external events' applauds competition and comparison, which forces pupils to act, think, and behave in a certain way to win. In other words, the pupils are under pressure and feel controlled and the lack of self-determination diminishes the individual's sense of autonomy and intrinsic motivation.

**Mastery and performance orientation shift during the transition**

In line with the aforementioned evidence and reasoning, extrinsic motivational orientation undermines pupils' motivation and positive attitude toward class and school. Apart from distinct environmental factors between primary and secondary schools, the grading practice is another extrinsic incentive which is specially stressed. As Eccles, Midgley and Adler (1984) pointed out the junior high school, in comparison to the elementary school, is more impersonal, more formal, more evaluative, and more competitive. Secondary schools are characterised by higher requirements of academic performance and standardised examinations for evaluation. The impersonal evaluation provides pupils with an objective judgment of their performance and reminds them to locate their ranking in the class or school, which contributes to a form of social comparison.

Turning to goal theory evaluation, a different perspective can explain the decreased motivation after transition. Goal theory is concerned with how people think about themselves, their tasks and their performance. Nicholls (1984) states that people have different reasons for learning, either because they want to strengthen their competence, or because they want to display their ability and surpass others. Referred to by various names, the former type of learning is entitled 'task involvement / task orientation / mastery goal'. People who are mastery-oriented tend to study out of their intrinsic motivation to make progress in their ability without regard to the performance of others. In other words, the comparison between themselves and peers is not important to them and mastery-oriented learners are more likely to persist in goal attainment in the face of difficult tasks (Leo, & Galloway, 1996).

As for the latter type of motivational process, it is called 'ego involvement / performance orientation / performance goal'. When learners are oriented to performance goals, they engage in the tasks because they

want to outperform the peers and demonstrate their ability (performance-approach). In contrast, they might also choose to disengage in the tasks to maintain the positive viewpoints about their ability and avoid the appearance of incompetence (performance avoidance). Nicholls (1984) describes that individuals classified as performance avoiders usually have high ego involvement and low perceived competence, and they seek to avoid low normative judgments.

Some literature has explicated that early adolescents experience the school environment as transforming from more mastery orientation to more performance orientation (Anderman & Midgley, 1997; Midgley, Anderman & Hicks, 1995; Warburton & Spray, 2008). In Anderman and Midgley's (1997) longitudinal research, 341 students were surveyed in the last year of elementary school and again in the following year when they were in the first year in middle school. Personal task and performance goal orientation, perceptions of the task and performance goal structure in the classroom, and perceived academic competence were the five constructs to be assessed. A 5-point Likert-type scale was adopted and the questionnaire focused on English and mathematics. Unsurprisingly, students espoused performance goals and their classrooms became more performance-oriented after the transition than before. The result was found that the transition did not affect all of those students but greatly impacted on lower ability females. The issues of appearance image, interpersonal relationship and relationship with adults were the possible factors to cause grades to decrease from the researchers' inference. In contrast, higher achieving females did not experience negative change from transition and they were perceived as more capable of coping with pubertal and academic changes.

With the previously mentioned ability beliefs shift, early adolescents at this stage start to regard ability as being less modifiable and begin to realise that more effort does not necessarily improve inherent intellect. Combining those psychological factors, in the more competitive secondary school

environment, those high achieving females compare their performance with that of their classmates and feel superior in academic ability, and this is associated with attributions of success to higher ability from students' perspective (Nicholls, 1979). In other words, for some students, their self-efficacy and self-perception are increased at the expense of others' failure. On the contrary, the lower achievers attribute their poor performance to deficiency in ability and in order to protect their self-worth, they avoid competition or stop trying to deflect the inference of incompetence because a combination of diligence and failure is compelling evidence of low ability (Johnson, 1994; Kun & Weiner, 1973). As Nicholls (1979, p.45) said, '*fairness of exams has been simulated well enough to make failure more personal and painful. A genuine or fair competition produces the clearest possible information for ability attributions, and therefore causes a strong connection between motivation and performance*'. The above analysis seems cruel but reflects the reality of life in classrooms.

A student with mastery orientation or performance orientation demonstrates entirely different attitudes to learning and study strategies. With the belief that success depends on hard work, interest, and understanding instead of rote memorisation, the mastery-oriented students enjoy coping with difficult questions and pay persistent attention to learn out of intrinsic interest. This attitude contributes to 'deep-processing' strategies and they link new knowledge with prior experience to seek full comprehension (Nolen, 1988; Murdock, Hale and Weber, 2001). In contrast, performance-oriented pupils are affected by heightened competition and comparison, and extrinsic rewards are what they pursue, such as getting good marks, impressing teachers and gaining the peers' respect. However, the less intrinsic motivation leads to 'surface-level' strategies'. They tend to memorise the factual knowledge in a short time to pass school tests, but difficulty and frustration can easily hinder their persistence in learning (Murdock *et al.,* 2001). Therefore, the motivation orientation affects pupils'

learning strategy use either in an adaptive or maladaptive direction (Nolen, 1988).

Lam, Yim, Law and Cheung (2004) conducted research in two secondary schools to investigate the outcome of two different types of learning strategies. Fifty-two seventh-grade pupils were separated into two classrooms and one of the classrooms was mastery-oriented, stressing the enjoyment of learning a typewriting course and the other was performance-oriented, accentuating grades and class comparison. After a taught session, two tasks were assigned to every pupil (one easy task and one difficult task). The students in the competitive condition outperformed the non-competitive group in the easy task. But the opposite result was shown in the difficult task. The result reflected that performance-oriented learning strategy (or surface-level learning) was beneficial to an easier task/exam, but could not ensure the same outcome in a more difficult one.

Similar conclusions are also explicated in Grolnick and Ryan's study (1987) comparing two groups of learners' motivation and learning outcome. They found that pupils showed more anxiety and less interest in a reading task when they were told that they would be given a test another day. In contrast, without exam pressure, the other group of pupils was more interested in reading the text. After testing their comprehension of the task, the first group recalled more rote materials but the second group had a stronger conceptual understanding of the task. More interestingly, after eight days, in the re-test, the first group members' understanding dropped substantially but the second group maintained their understanding of the material, which indicated that a task-oriented adaptive strategy did improve the retention of understanding.

As a result, it is argued that competition does not facilitate deeper learning and the performance-oriented school structure is hazardous to some pupils' perceived competence. Pupils avoid challenge because they are not sure of winning and therefore they lack a sense of adventure in learning and

always seek quick solutions (Kaplan & Maehr, 1999). From personal experience, teachers tend to employ tests as a means to require pupils to learn but this extrinsic incentive possibly not only decreases their motivation but also creates a 'winner or loser' environment if the examination is only used to test superficial understanding and compare students' competence. When applying goal theory to practical teaching, it can be clarified that the mastery goal is constructed by encouraging students to understand the contents, regard failure as a process, and value persistent trials and errors (Urdan & Turner, 2005). Meanwhile, the abovementioned two pieces of research may remind us to re-consider school examinations. The underlying meaning behind those evaluations should be explored. Do the examinations merely test students' factual knowledge and in turn reinforce the message that performance-oriented strategy use is enough for passing the tests? Diseth and Martinsen (2003) claimed that the nature of examinations, from their perspective, leads students to utilise short-term learning strategies. Scouller (1996, 1998) also found that the multiple-choice format tends to elicit memorisation-related activities and is better replaced by assignments for deeper learning.

However, adaptive or maladaptive learning strategies affect not only academic achievement but also well-being (Covington, 1992). In primary school, the more mastery-oriented structure stresses efforts, small group tasks, collaborative learning. In contrast, the competitiveness in secondary school has a great impact on lower achieving students' psychological well-being (Kaplan & Maehr, 1999). The constant failure, humiliation and 'loser' labelling generated from comparison undermines personal self-esteem, and in the long run, those pupils manifest a 'helpless' pattern alongside negative emotion, disengagement and anti-social behaviour (Dweck & Leggett, 1988). Suicidal thoughts and cheating are two direct negative effects of performance-oriented structure. Asian education systems in comparison to western systems, is characterised by higher competition and by being exam-

driven. *Time,* for example (Bennett, Horn, Huang, Ko, Macintyre, & Wong, 2002) covered a 7-year-old student who committed suicide after failing a test in Chinese dictation and mentioned that one in three teenagers in Hong Kong have had suicidal feelings. In terms of cheating, lower academic self-efficacy is assumed to raise the possibility that pupils would cheat (Murdock *et al*., 2001). Anderman and Westerfield (1998) found a direct support for a relationship between orientation structure in the classroom and cheating, indicating that cheating was inversely related to task goals and positively related to extrinsic motivation. When asked why they cheated in the exams, according to Michaels and Miethe's (1989) study, pupils replied 'fear of failure' most. In terms of a pedagogical strategy to maintain pupils' motivation, an inevitable element is the cultivation of a positive peer culture in secondary schools. Teachers play a salient 'interventionist' role to provide instructional assistance and create an amicable environment and cooperative atmosphere in the classroom to support the struggling students (Hamm, Farmer, Lambert & Gravelle, 2013). It is clear that various facets of the school environment have a strong effect on pupils' motivation shift and subsequent social behaviour. For example, schools on the one hand espouse personal progress and versatile development, but on the other hand, stress standardised examination pass rates and grade performance. An overly comparison-centred secondary school culture might cause more psychological and behavioural problems and cumulative pressure undermines pupils' motivation.

From the literature mentioned above, it is clear that mastery-orientation contributes to deeper study but performance-orientation only retains personal ability at the surface level and causes a hiatus in progress (Meece, Blumenfeld, & Holye, 1988; Nolen, 1988; Nolen & Haladyna, 1990; Pintrich & De Groot, 1990; Pajares & Miller, 1994). However, some research is beginning to explicate that these goals are not opposite ends of a continuum but 'a right angle' in nature and a learner could use both of them

depending on the difficulty of the learning scenario he/she is faced with (Ainley, 1993; Harackiewicz, Barron, Pintrich, Elliot & Thrash, 2002; Maehr & Pintrich, 1991). In Elliot and McGregor's research (1999), they found that a performance-approach is positively related to exam performance, and mastery goals facilitate learners' retention of exam-relevant materials. The same conclusion is shown in Harackiewicz, Barron, Pintrich, Elliot and Thrash's research (2002), which links performance-approach goals with some adaptive outcomes. Harackiewicz *et al*. (2002) brought forth an 'interactive goal pattern', stating that the optimum learning strategy is the simultaneous adoption of a performance-approach goal and mastery goal. The Mastery × Performance-Approach Goal interaction ensures that the immense inner motivation can meanwhile be demonstrated by the external high grades, resulting in the highest overall level of performance (Elliot & McGregor, 1999; Harackiewicz *et al.,* 2002). For example, students may choose mastery goal when they study the contents of subjects, and use performance-approach goal to prepare for exams. The multiple goal perspective suggests that the combination of these two seemingly antagonistic goals (Mastery and Performance goals) provide the different types of students with a selective goal pattern to employ. In this way, the compatible form of approach can function effectively.

## Conclusions

This article has unveiled the contextual transition between primary and secondary education in order to investigate the causes of the decline in motivation shown in various related studies. Firstly, the mismatch between expectations and reality deters pupils from further engagement in secondary school. The secondary school ethos does not correspond to the incremental sense of autonomy. Because of stricter school regulations, a more rigid national curriculum and more distant teacher-student relationship in contrast

to primary school system, students have fewer chances to make their own decisions and express their self-determination. The decreased autonomy and impersonalised student-teacher relationship makes the pupils feel controlled; this is associated with deterioration in motivation. Secondly, the continuity of the national curriculum and the 'transition support programme' should be carefully re-examined. Although the implementation of national curriculum tends to construct consistent and continuous subject plans to link primary and secondary curricula, Gorwood (1994) countered this positive statement, arguing that the national curriculum not only is questioned regarding the ability to bridge the gap between primary and secondary schools by educators and parents, but also may undermine the original motivation-oriented primary education. For example, primary school teachers used to encourage pupils to talk about their interests and write down personal goals and resolutions in classroom. However, with the advent of the national curriculum, primary school teachers are scheduled by a fixed timetable and are aware that time is not always available for pursuing interest maintenance.

Thirdly, the competitive environment in secondary schools fails to maintain this high level of motivation which exists in primary schools. Constant comparison damages lower achieving learners' self-perception and self-efficacy, leading to maladaptive strategy selection to avoid challenge and prevent the implication of incompetence. For other students, they either perceive academic- and grades-centered secondary education as a 'winner takes all' arena or else they adopt a surface-level learning strategy to get the extrinsic rewards as soon as possible. However, even though a number of studies have articulated the optimum learning scenario for students, contaminating factors such as unconscious comparison, self-assessment by grades, and exam pass rates unintentionally have a deleterious effect on the learning environment and this is deemed to be the hardest obstacle to overcome when education practitioners attempt to apply theories to practice. Thus, it can be summarised that these three factors undermine the learning

environment of secondary education and are accountable for pupils' gradual loss of engagement at school.

Motivation is always one of the most important determinants of successful schooling. Several papers have indicated that belief in ability, self-perception and self-efficacy decrease after the transition to secondary school (Covington & Omelich, 1981; Dweck & Elliot, 1983; Dweck & Leggett, 1988; Elliott & Dweck, 1988; Nicholls, 1984). However, one point that should be noted is that the deterioration may not be uniform across all subjects; indeed, a student may actually become more motivated in non-academic subjects, such as sports and music despite a drop in the overall level of motivation and this shows that care should be taken before making generalisations. Likewise, this phenomenon of a decrease in motivation should not be regarded as being universal, given that the social, cultural and educational factors vary across countries.

In terms of the pedagogical strategies conducive to maintaining and boosting pupils' motivation, the techniques that enhance learners' intrinsic motivation and mastery goal should be incorporated in teaching and classroom management. Besides, incremental empowerment, a supportive peer culture and a closer teacher-student relationship can not only engage pupils in academic study, but also in school activities (Eccles *et al*., 1993; Hamm *et al*, 2013; Midgley *et al*., 1989). Liaison between primary and secondary schools, including communication between primary and secondary school teachers, the supply of students' background and performance information, and the exchange of teaching methods and understanding of the continuity of the curriculum can all help to achieve an ideal 'seamless' transition (Rainer & Cropley, 2013, p.8).

In addition, it should be also stressed that extrinsic motivation / performance goal and intrinsic motivation / mastery goal are not the opposite ends of a continuum and the traditional framework therefore is under reconsideration (Ainley, 1993; Harackiewicz *et al*., 2002; Maehr & Pintrich,

1991). By breaking the dichotomous approaches, the theories of 'internalisation' and 'the Mastery × Performance-Approach' have received more attention recently and these multiple pathways provide yet a third way to maintain and enhance pupils' motivation. The task of transforming extrinsic motivation and performance goal into an adaptive learning strategy is now underway. Further study can seek the combination of the intrinsic-extrinsic motivation and goal theory to cultivate pupils' adaptive learning strategies and establish more effective and efficient teaching methods to produce a higher quality of schooling.

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