Linking student motivation and well-being

Tuominen-Soini, Heta

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Capacity building and advancing the understanding of productive youth development in an international context are the objectives of the PATHWAYS Post Doctoral Fellowship Programme which has been funded by the Jacobs Foundation since 2008. In our biannual issue of the PATHFINDER, we report on research conducted by the PATHWAYS fellows and PIs. Issue number 7 focuses on studies examining the association between motivation, academic attainment, and students’ wellbeing.

What motivates young people to engage in education, and are variations in motivation associated with psycho-social adjustment and wellbeing? The two papers represented in this issue of the PATHFINDER examine the role of positive self-beliefs and achievement goal orientation in shaping academic attainment, as well as wider psycho-social adjustment.

One of the contributors is Philip Parker, a PATHWAYS Alumni, now based at the Institute of Positive Psychology and Education at the Australian Catholic University in Sydney. He reports on his most recent work, testing the role of self beliefs in shaping education progression, but also as predictors of social relationships. Using a sample of Australian high school students Philip shows that self beliefs are not merely an outcome, but can indeed act as drivers regarding both the quantity and quality of social support. The effects are similar for males and females, and tend to accumulate across high school. He therefore recommends that interventions in school should help young people to view themselves positively, to learn to forgive oneself and understand one’s personal weaknesses.

Heta Tuominen-Soini, the other PATHWAYS Fellow featured in this newsletter, is based at the Institute of Behavioural Sciences at the University of Helsinki. Using a person-centered approach, Heta identifies four distinct groups of students with different goal-orientation profiles, which she then links to patterns of socio-emotional outcomes, such as emotional distress, burnout, stress and feelings of exhaustion, as well as feelings of self esteem. She finds that mastery-oriented students, i.e. those who focus on the development of their skills and competences, show the highest levels of well-being, while success-driven, performance oriented students are prone to burnout. Indifferent students do not thrive in school and do not seem to have any severe problems, while avoidance-oriented students are characterised by multiple problems, such as low levels of self esteem, high levels of depression, and low levels of school engagement. Heta’s findings have implications for the assessment of students, which should not only focus on academic attainment and motivation, but also take into account indicators of psycho-social wellbeing. Regarding educational practice, Heta recommends that it is important to pay attention to groups of students with different patterns of achievement related strategies and to provide learning environments that meet their different needs, such as emphasising personal progress and reducing an excessive focus on social comparison.

Together these studies seem to suggest that a school environment that supports and celebrates personal progress, and is less focused on competition and social comparison, can reduce stress and burnout among students and foster social connectedness and support.

For further information
Please visit our website to find out more about our work and the team:

www.pathwaystoadulthood.org
Positive self-beliefs drive access to social support across high school

Formulation of self beliefs is an important developmental task

Self-beliefs and their impact on educational choices were a critical focus of my research during my time as a PATHWAYS fellow (e.g. Parker, et al., 2012a, 2013, in press). Other fellows, mentors, and I have shown that academic self-concept during high-school predicts university entry and major selection over-and-above academic achievement. Indeed, in some cases we found it to be a larger predictor than academic achievement! Likewise, Julia Dietrich, Katarina Salmela-Aro, and I (Dietrich et al., 2012) recently noted that developing a career self-concept is a critical developmental task of secondary schooling. The pathway to adulthood is more than careers and degrees, however, and I am becoming increasingly interested in the effect of self-beliefs on other aspects of development. In particular, I am now focusing on the association between young people's self-beliefs and social relationships. During adolescence and emerging adulthood, young people increase their circle of influence, turning to friends as well as family for advice and support to cope with the myriad of developmental tasks and transitions that accompany this period (Parker et al., 2012b).

Self beliefs and their association with social support

The importance of social support for adaptive development during adolescence and during the transition to adulthood is a common theme in the PATHWAYS to Adulthood programme, and in developmental and educational psychology more broadly (Fuligni & Eccles, 1993). Social support protects against mental illness and promotes well-being. Individuals jointly develop occupational and educational plans for the future with their family and friends (co-regulation or joint projects; Dietrich, Parker, & Salmela-Aro, 2012) indicating the centrality of social support for transitions into adulthood.

Motivated by this, the question that my colleagues and I at the Institute for Positive Psychology and Education (IPPE) asked was: "what role do self-beliefs play in receiving social support". There are two perspectives on this relationship. First, that self-esteem reflects the degree to which we feel valued by and connected to others. Second, that positive self-regard provides a resource from which young people draw to engage in behaviours that build and maintain social support.

Using data from the Wollongong Youth Study, we found that self-esteem predicted changes in social support quality and quantity, but not the other way around (Marshall et al., in press). The findings are based on results from a five-wave autoregressive cross-lagged structural equation model. Importantly, the pattern of relationships was the same for each year of high-school, i.e. self-esteem assessed in the previous year predicted approximately a tenth of a standard deviation increase in quantity (size of social network) and perceived quality of social support across the five years of the study (see Table 1).

Table 1: Standardized Effects from Cross-lagged Structural Equation Model

<table>
<thead>
<tr>
<th>Time Wave(T)</th>
<th>Self-esteem</th>
<th>Social Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1</td>
<td>T-1</td>
<td>Quality</td>
</tr>
<tr>
<td>Self-Esteeem</td>
<td>.73***</td>
<td>.01</td>
</tr>
<tr>
<td>Social Support:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>.13***</td>
<td>.53***</td>
</tr>
<tr>
<td>Quantity (Network size)</td>
<td>.10***</td>
<td>.03</td>
</tr>
</tbody>
</table>

Notes. *** p < .001. Results taken from the developmental equilibrium model, the best fitting model, in which relationships between social support and self-esteem were hypothesised to be stable across the five years of the study. The parameters are in standardized form.
Thus, these relationships reached a so-called developmental equilibrium. Furthermore, the results were the same for both boys and girls. Although the effect of self-esteem on social support was small, it could accumulate across high-school. Therefore, the accumulated effect of self-esteem on perceived social support may be quite large by the time young people are ready to transition to university or the labour market.

Conclusion and outlook

Our paper suggests that self-beliefs are not merely an outcome but an active driver of development and that they can have critical implications to young peoples’ pathways to adulthood. As such, interventions in schooling which help young people to view themselves positively are important and may raise both personal resources and social resources that young people draw on as they face obstacles and set-backs during the transition into adulthood.

It is worth noting that there is a potential dark side to self-esteem, as it is associated with narcissism, feelings of superiority, and potentially devaluing of others. As such my colleagues and I at IPPE have been looking for moderators of self-esteem (Marshall, Parker, Ciarrochi et al., in submission). Recently we have identified self-compassion, i.e. learning to forgive oneself and understanding personal weakness as part of the human condition, as a critical factor of interest. Our preliminary results suggest that self-compassion seems to protect young people with low self-esteem from its potential debilitating relationship with poor mental health.

This is exciting research for us, both because self-compassion does not appear to have the same ‘dark side’ as self-esteem, and because there are articulated interventions (e.g., acceptance and commitment therapy and mindfulness), which can aid in the development of self-compassion.

References

Linking student motivation and well-being: Achievement goal orientation profiles and socio-emotional outcomes

Heta Tuominen-Soini & Katarina Salmela-Aro
University of Helsinki

Are students who are performing well academically, also doing well emotionally?

This question was motivated by findings from various international studies (e.g., PISA, HBSC) which showed that although Finnish youth are doing well when it comes to academic attainment, they do not like school and they feel pressured by schoolwork compared to students in many other countries. Could there be a flip side – a cost of some kind – associated with the PISA success?

Going to school, studying, and academic achievement are surely important to adolescent students, shaping their self-evaluations and socio-emotional well-being. Adolescents’ academic and emotional functioning have shown to be interdependent (e.g., Roese, Eccles, & Strobel, 1998) and, therefore, we look at both domains of functioning and examine how they combine within individuals.

Students’ motivational tendencies: Achievement goal orientations

Achievement goal theory (e.g., Dweck, 1986) has proven particularly useful for understanding students’ motivation for schoolwork. Achievement goals reflect reasons for engaging in academic tasks. The central distinction in the literature has been between students’ strivings towards developing their competence (mastery goals) and towards demonstrating their competence (performance goals). However, understanding student motivation is a complex matter and, indeed, research has further divided mastery and performance goals and described additional goals (e.g. work avoidance goals). Most of the earlier work focused on single goals and their effects on students’ motivation and academic performance but, later, research endeavour has moved beyond the theoretical considerations of single goals towards the idea that students can pursue multiple goals simultaneously (e.g. Pintrich, 2000).

Focus on groups of individuals

In our work we were interested in what kinds of achievement goal orientation profiles can be identified among lower and upper secondary school students and how students with different motivational profiles vary regarding the level of general and academic well-being and academic achievement. In a series of studies we examined the interplay and developmental dynamics between student motivation and well-being (Tuominen-Soini, Salmela-Aro, & Niemivirta, 2008, 2011, 2012; see also Tuominen-Soini, 2012) using a person-oriented approach, which is useful whenever it is assumed that the data include heterogeneous groups of individuals. The person-oriented analytical approach is particularly applicable for achievement goal researchers as it enables the consideration of the endorsement of multiple goals. Accordingly, we used latent profile analysis (a model-based variant of traditional cluster analysis) to classify students into groups based on their patterns of achievement goal orientation.

Our sample: 15–17-year-old students in Finland

The data were drawn from the Finnish Educational Transitions Studies (FinEdu, 2014), which is an ongoing follow-up study investigating the educational transitions and choices of young people with a special emphasis on the role of personal goals, motivation, and subjective well-being. In Finland, ninth-graders face an important choice after completing compulsory schooling: whether to apply for general or vocational upper secondary education. The participants of this longitudinal study were about 15-year-old ninth-graders (N = 700) from comprehensive schools and about 17-year-old students (N = 600) from general upper secondary schools, who were then followed across the forthcoming educational transitions.

Diverse achievement goal orientation profiles

Four groups of students with different goal orientation profiles were identified (see Figure 1). Both mastery-oriented and success-oriented students emphasized learning and getting good grades, but success-oriented students also endorsed performance goals (e.g. outperforming others). Approximately 20–30% of the students belonged to the mastery-oriented group, depending on the sample. Students emphasizing performance constituted a rather large group, about one-third of the students. Indifferent students represented a “typical” student who seeks to do what is expected (to learn and perform well), but also tries to minimize the required effort. Over one-third of the students belonged to the indifferent group. Avoidance-oriented students deliberately aimed at minimizing the effort and time spent on studying. This was usually the smallest group (= 10%).

PathFinder – Issue 7 April 2014

4
Socio-emotional outcomes

Mastery-oriented students display the most adaptive motivation and well-being, while success-driven students are vulnerable to school burnout.

Both mastery- and success-oriented students were highly engaged in studying, found their schoolwork meaningful and performed well, although success-oriented students' stronger concerns with performance seemed to make them more vulnerable to emotional distress. To be precise, compared to mastery-oriented students, success-oriented students displayed more exhaustion, feelings of inadequacy, stress, and preoccupation with possible failures – despite their apparently positive goal profile, high engagement, and excellent academic achievement. They even experienced more depressive symptoms than mastery-oriented students.

Indifferent students' academic motivation is not ideal.

We identified a large group of indifferent students, whose motivation was less than optimal. These students with competing goal preferences, who were also reluctant to invest in the attainment of these goals, seem to display relatively low school value and engagement. They also have a preference for easy tasks and a tendency to worry about failing, and give up easily. Indifferent students did not thrive in school, but they did not seem to have any severe emotional problems either.

Avoidance-oriented students characterized by multiple problems.

In stark contrast to mastery-oriented students, avoidance-oriented students represented an unfortunate group of adolescents with multiple risks; low academic motivation and poor emotional well-being. Avoidance-oriented students were characterized by relatively low levels of school value, engagement, and self-esteem and high levels of depressive symptoms, inadequacy, and especially cynicism towards school. Their academic achievement was poor compared to the others.

The importance of including both academic and well-being outcomes.

The findings demonstrate that it is crucial to include measures of well-being when evaluating the role of goal orientations in learning, motivation, and achievement. The consideration of academic outcomes alone would be seriously limited as some significant socio-emotional outcomes might be masked. To give an example, depending on the differences in goal orientation profiles, high achievement may or may not be associated with emotional exhaustion and stress (success-oriented vs. mastery-oriented), just as low achievement may or may not be associated with a broad range of psychological distress (avoidance-oriented vs. indifferent).

Identifying and assisting students with different motivational mindsets.

The existence of such a notable variation among students has implications for educational practice. The findings suggest that it is important to pay special attention to groups of students with different types of school-related problems and risks and, further, support their school adjustment by creating learning settings that more appropriately meet their needs and goals.
Some adolescents need interventions that enhance motivation and engagement (avoidance-oriented and indifferent), while others may benefit more from services and interventions that promote well-being (especially the success-oriented students). Those students who have multiple problems (avoidance-oriented) might benefit from both types of interventions. Also, it would be important to recognize those few students who seem to experience an extreme dysfunctional change in their motivational tendencies and to support their commitment and valuing of school, so that they would not be alienated from school and in danger of dropping out.

Mastery goals should be supported and encouraged to promote motivation and well-being among all students’. Personal progress should be encouraged to promote motivation and socio-emotional functioning; and (c) that goal patterns are rather stable before and across educational transitions. Further, the findings demonstrate that only some students encounter multiple risks (such as showing both declining motivation and different types of adjustment problems), some students navigate the transitional phase without notable problems, and some become increasingly motivated and engaged in studying. To support well-being among students, it is crucial to take into account individual differences and development of motivation over time.

In our future work, we will apply and integrate three theoretical frameworks: achievement goal theory, expectancy-value theory, and school engagement literature and, accordingly, explore the importance of several motivational constructs (and their interactions) on socio-emotional well-being, educational aspirations, and long-term educational attainment. First, within the ongoing FinEdu (2014) and Mind the Gap (2014) projects, we are currently investigating goal stability and change during various educational transitions as well as the transition from school to work. Second, we will explore how achievement goals and task values function as a coherent set within individuals. The focus will be on subject-specific motivation and, in addition, we will take into account the multidimensionality of value beliefs and focus specifically on cost value, which has been largely ignored in past empirical work (see Gaspard et al., 2013; Trautwein et al., 2012). Finally, we will investigate the diverse patterns of school engagement and burnout among students from various educational contexts and how they are related to motivation and school completion vs. dropout in the long run (see Tuominen-Soini & Salmela-Aro, 2014). By integrating several theoretical frameworks, we aim to get a more profound grasp of the complex interactions among motivation, engagement, affect, and achievement and to better understand students’ motivation to learn in the classrooms.

Conclusions and future directions

In summary, the results of the studies indicated that secondary school students (a) endorse multiple achievement goals simultaneously; (b) that these goal patterns are differentially associated with academic and socio-emotional functioning; and (c) that goal patterns are rather stable before and across educational transitions. Further, the findings demonstrate that only some students encounter multiple risks (such as showing both declining motivation and different types of adjustment problems), some students navigate the transitional phase without notable problems, and some become increasingly motivated and engaged in studying. To support well-being among students, it is crucial to take into account individual differences and development of motivation over time.

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References


PathFinder – Issue 7 April 2014
Author profile:
Philip D. Parker

Dr Philip Parker is currently an Australian Research Council DECRA funded research fellow at the Institute for Positive Psychology and Education (IPPE).

Philip studied psychology at the SELF research centre at the University of Western Sydney where he received a first class honours degree and the Australian Psychological Society Science Prize for his thesis. He then completed his PhD at the University of Sydney on the role of motivational constructs and processes in the development of teacher burnout and subjective well-being.

Philip’s research uses large longitudinal databases from the Australia, US, UK, Switzerland, Germany, and Finland where he focuses on career pathways, personality, and well-being issues related to youths’ transition from school to work or further education.

Philip has published in a number of international journals including Child Development, Developmental Psychology, Journal of Educational Psychology, Learning and Instruction, Journal of Personality, and Teacher and Teacher Education. He also published a number of book chapters and peer-reviewed papers in international conferences proceedings and monographs.

Philip was PATHWAYS fellow from January 2010 to July 2011, when he was based at the Max Planck Institute for Human Development, Berlin, and the University of Tübingen. He worked with longitudinal data from Germany and Finland on motivation, personality, and well-being issues related to youths’ transition from school to work or further education.

Philip is the holder of an Australian Research Council Discovery Early Career Research Award.

In 2013, Philip, in collaboration with Herbert Marsh and Alex Morin, was awarded funding by the Australian government for a 3 year project: “Making Australia internationally competitive: driving educational attainment by academic motivation, self-concept, engagement and aspirations”.

Author profile:
Heta Tuominen-Soini

Heta Tuominen-Soini is a post-doctoral researcher based in the Institute of Behavioural Sciences, University of Helsinki, Finland working with Professor Kati Salmela-Aro

Heta joined the PATHWAYS programme in December 2012 following completion of her PhD in Education. Her dissertation received the Doctoral Dissertation Award of University of Helsinki. In 2014, she was chosen to be the Valedictorian or ‘Primus Doctor’ at the conferment ceremony.

Heta has been involved in the Finnish Educational Transitions (FinEd) Study led by Kati Salmela-Aro, from its onset in 2003 up to 2014. Currently, she is also involved in the Mind the Gap between Digital Natives and Educational Practices -project.

Heta has published papers in leading journals such as Developmental Psychology, Learning and Instruction, Contemporary Educational Psychology, and Learning and Individual Differences. She has presented her research at several international conferences including the EARLI Conference for Research on Learning and Instruction, the International Conference on Motivation, the European Conference on Developmental Psychology, and the International SELF Research Conference.

Heta is interested in exploring the relationships between student motivation and well-being. The findings of her dissertation demonstrated the importance of including measures of well-being when evaluating the role of achievement goal orientations in learning and achievement. Her present work links the study of motivation and well-being, investigating individual differences in, and developmental dynamics between academic motivation and well-being among adolescents and young adults. More specifically, her work will focus on three main areas: 1) achievement goals, goal stability and change, and socio-emotional outcomes, 2) subject-specific (e.g., mathematics) achievement goals and task values and their relations to academic well-being, and 3) school engagement and school burnout and long-term educational outcomes.
PATHWAYS Presence at AERA 2014

The 2014 annual meeting of the American Education Research Association (AERA) was a great opportunity for the PATHWAYS Fellows and PIs to showcase their work. The AERA president, Barbara Schneider, set the theme for the conference with a focus on ‘The Power of Education Research for Innovation in Practice and Policy’. In her presidential address she spoke about ‘Aligned ambitions: what’s behind the college mismatch problem?’. A SIG key note address was delivered by Jacquelynne S. Eccles on ‘Motivation in education’. Ulrich Trautwein, Katarina Salmela-Aro and Ingrid Schoon presented their work in an invited Presidential Session on ‘New Social Roles for Adolescents: Challenges and Opportunities’.

The Fellows organised two symposia which were very well attended and received:

- ‘Educational Inequality Across Countries and Over Time’ organised by Anna Katyn Chmielewski, with presentations by herself, John Jerrim, Nicola Pensiero, Phil Parker and Hanna Dumont. The discussant was Ingrid Schoon
- ‘Subjective Task Values and Influences on their Development from an International Perspective’ organised by Anna-Lena Dicke and Ulrich Trautwein. Presenters included Angela Chow, Jenna Cabria, Sherifa Mahama and Anna-Lena herself. The discussant was Jacquelynne Eccles.

Pathways News

New PATHWAYS Fellows

We are pleased to welcome two new fellows to the Programme this year.

Clemens Lechner became a PATHWAYS Fellow in January 2014 at the University of Jena. His research focuses on the potential role of religiosity in dealing with these challenges in times of social and economic change.

Julia Moeller commenced her PATHWAYS Fellowship in March 2014 at the University of Helsinki. Julia’s research focuses on the development of motivation, practice and performance in learning contexts, using intensive longitudinal data.

PATHWAYS Successes

Hearty Congratulations to Martin Obschonka on his appointment as Assistant Professor of Entrepreneurship and Innovation Psychology at Saarland University, Germany. Martin will continue his affiliation with the University of Jena.

Congratulations also to Anna Katyn Chmielewski who has accepted a tenure-track assistant professorship of Educational Leadership and Policy at the Ontario Institute for Studies in Education, University of Toronto.

New Publications

Two books co-edited by PATHWAYS PI Rainer Silbereisen have recently been published:

Psychology, Education and Training (Psychology Press)
http://www.psypress.com/books/details/9781848721517/

The Challenges of Diaspora Migration: Interdisciplinary Perspectives on Israel and Germany (Ashgate)
http://www.ashgate.com/isbn/9781409464242

Upcoming event

International Conference on Motivation ICM 2014: Understanding and Facilitating the Passion to Learn

12 - 14 June 2014
Faculty of Behavioural Sciences, University of Helsinki Helsinki, Finland.

Keynote speakers include Katarina Salmela-Aro, Ulrich Trautwein and Helen Watt.

For further information see: www.icm2014.fi

Principals Investigators and participating institutions

- Lars Bergman – Stockholm University
- Jacquelynne S. Eccles – University of Michigan
- Katarina Salmela-Aro – University of Helsinki
- Barbara Schneider – Michigan State University
- Ingrid Schoon – Institute of Education, University of London
- Rainer K. Silbereisen – University of Jena
- Ulrich Trautwein -University of Tübingen

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