CHAPTER 4: AUTONOMY

Defining Autonomy

Autonomous activities are self-chosen, concordant with one's intrinsic interests. Autonomy thereby implies having input or voice in determining one's own behaviour (Deci & Ryan, 1985). In their review of the literature, Eccles and Gootman (2002) identified support for efficacy and mattering as a key feature of positive youth development settings. Support for efficacy involves practices that support autonomy, such as participation in program decision-making and leadership (Eccles & Gootman, 2002). Factor analyses have also confirmed the analytical distinctness of autonomy from self-esteem, mastery and mattering, emotional reliance, and social support (Van Gundy, 2002).

Historically, there have been challenges in adequately defining and operationalizing the term "autonomy" (for a review, see Van Petegem, Vansteenkiste, & Beyers, 2013). To address these challenges, Van Petegem and colleagues (2013) sought to examine youth autonomy in the context of both its healthy and dysfunctional manifestations. As such, they explored the construct on two distinct dimensions: 1) independence (i.e., behaving, deciding, and thinking without relying on others) and, 2) volition (i.e., acting upon personal interests, values, and goals). To test their perspective of the construct, they administered two studies with a sample of 707 Belgian adolescents from Grades 9-12, and a sample of 783 adolescents aged 14-21, which clearly yielded a two-factor model consistent across grade level. The model accounted for 58% of the total variance with Tucker's phi indices showing good congruence for both dimensions, suggesting that the model was a good fit for the data. This study provides clear evidence of a two-dimensional structure of autonomy.

Another perspective, proposed by Beyers and colleagues (2003), suggests examining youth autonomy from a dimensional framework. Factor analysis results suggest that autonomy is best understood within the context of four factors that are theoretically distinct, but related: 1) connectedness, 2) separation, 3) agency, and 4) detachment. Beyers and colleagues administered self-report questionnaires to 601 middle adolescents to conduct a confirmatory factor analysis (CFA) of the proposed dimensional model of autonomy. Their final model, with a good fit of the data ($\chi^2(84) = 410.36$, RMSEA = .08, GFI = .91), consisted of the following four factors: Connectedness (Parental Reciprocity, Adolescent Reciprocity, Mutuality, Dependency, Emotional Closeness, Availability), Separation (Deidealization, Non-dependency, Individuation), Agency (Attitudinal Autonomy, Emotional Autonomy, Functional Autonomy), and Detachment (Parents as People, Coolness/Rejection, Open Confrontation). All items had high and adequate loadings on their respective factors (.36-.99).

Beyers and colleagues (2003) conducted an additional study with 374 first-year university students to examine whether or not the model was consistent across age groups. Similar to their previous study, all indices initially indicated poor fit of the proposed four-factor model. As such, modifications were made, and variables were excluded. The final model, which was an adequate fit of the data ($\chi^2(113) = 359.42$, RMSEA = .08, GFI = .89), consisted of the following four factors: Connectedness (Connection, Reciprocity, Cohesion, Trust, Communication), Separation (Separatedness, Deidealization, Non-dependency, Individuation, Secrecy), Agency (Attitudinal Autonomy, Emotional Autonomy, Functional Autonomy, Self-Reliance), and Detachment (Parents as People, Alienation, Conflict). All items had high and adequate loadings on their respective factors (.44-.89). While the findings consistently supported a four-dimensional model of autonomy, Beyers and colleagues (2003) cautioned readers about the complex nature of the construct. They advised researchers to use the term solely as an umbrella term and to employ specificity when investigating the construct. In terms of further research and program development, these studies indicate that certain dimensions of autonomy differ in importance for youth of different ages.

Outcomes

There is extensive evidence that youth autonomy, although a highly nuanced construct that represents a variety of youths' experiences, is related to a range of positive outcomes. For example, Van Petegem and colleagues (2013) provided psychometric evidence for the relation between one of the dimensions of autonomy, youth volition (i.e., acting upon personal interests and goals), and higher reported levels of well-being and lower reported levels of problematic behaviour consistently across various ages. Volition, which increases with age, was associated with secure attachment patterns, another indicator of positive youth development.

Cognitive/learning outcomes

Autonomy-support inside and outside of school settings is critical for positive effects on a range of indicators. Cognitive and learning outcomes are most often measured using direct indicators of achievement, such as graded performance and GPA, and indirectly using indicators such as motivation for learning, depth of processing, and student engagement. Outside of school settings, cognitive and learning outcomes can be measured using indicators of career exploration and career commitment.

Vansteenkiste and colleagues (2004) conducted a series of experimental studies, examining the relationships among intrinsic goals, autonomy-supportive learning climates, and academic learning and performance. In the first study with 200 female Belgian college students (19-20 years old) and their teachers, Vansteenkiste and colleagues found that providing an intrinsic rationale for learning, such as personal growth or health, in an autonomy-supportive rather than controlling context resulted in significant main effects on graded performance ($F(1, 196) = 7.12$, $p < .001$, $\eta^2 = .04$) and autonomous motivation for learning ($F(1, 196) = 25.92$, $p < .001$, $\eta^2 = .12$). The most positive outcomes were obtained when the task was framed by intrinsic goals in an autonomy-supported way: interaction resulted in synergistically high deep processing, test performance, and persistence. These results were validated by a second study with 196 Belgian marketing students (18-19 years old), and a 3rd study with younger youth in Grades 10 and 11 (N=224) with a focus on physical activity (Tai-bo) rather than on text material. Autonomy support and intrinsic goals interacted to produce additional positive effects on autonomous motivation ($F(1, 220) = 26.99$, $p < .001$, $\eta^2 = .11$) and on graded performance ($F(1, 220) = 4.10$, $p < .001$, $\eta^2 = .02$). While the results were statistically significant in these students, the effect sizes were low.

Student engagement, defined here as basic participation in school activities, tends to decrease among high school students as they get older (see Marks, 2000 for a review). Hafen and colleagues (2012) examined three critical factors (autonomy, competence, and relatedness) as predictors of changes in student engagement. Their study included high school students in Virginia (N=578) and teachers who filled out questionnaires before and after the course. The strongest predictor of change in engagement was adolescents' perceptions of autonomy in the classroom. Positive students' perceptions of adolescent autonomy predicted increases in observed student engagement ($\beta = .27$, $p = .04$) and student-reported engagement across the year ($\beta = .32$, $p = .02$). The relationship between autonomy and student-reported engagement has also been found among middle school students (Skinner et al., 2008).

Autonomy support from parents and teachers is critical for positive outcomes in school and job-seeking. Soenens and Vansteenkiste (2005) investigated a model of relationships between perceived parenting and teaching styles, self-determination[5] in three life domains (school, social competence,

[5] Self-determination involves self-regulation, self-governing, and "being the initiator of one's own actions" (Soenens & Vansteenkiste, 2005, p. 590).

and job-seeking behaviours), and specific adolescent outcomes. Autonomy-supportive parenting was significantly related to self-determination in all life domains. Autonomy-supportive teaching added significantly to the prediction of self-determination in school and in job-search, which are associated with higher GPA, increased school competence, and job exploration and commitment. This model was validated with middle- to late-adolescents using data from two studies including 328 Belgian students from Grades 10-12 between 15-21 years and 285 Grade 12-13 students between 17-22 years.

Summary

- Autonomy-supportive learning environments are related to improved school/activity performance and grades, greater autonomous motivation for learning, and deeper cognitive processing;
- Perceived classroom autonomy is related to student engagement; increased perceptions of classroom autonomy can mitigate the drop in student engagement that tends to occur with age;
- Autonomy support from teachers and parents predicts school achievement and competence, as well as job exploration and commitment.

Behavioural/social outcomes

In the behavioural/social domain, multiple dimensions of autonomy are predictors of behavioural problems. Behavioural problems are measured by indicators of delinquency or deviancy, and alcohol use. Gender and risk level may moderate these relationships.

Autonomy is additionally a predictor of positive behavioural/social outcomes, measured by indicators of social competence, social support-seeking behaviours, and physical activity. In a study by Van Petegem and colleagues (2013) with Belgian adolescents in Grades 9-12 (N=707), one dimension of autonomy, volition, predicted lower scores on indicators of problem behaviours. Volition was a significant unique predictor of deviant behaviour (β = -.12) and alcohol abuse (β = -.15). Distance, the second dimension of autonomy used in this study, was a significant unique predictor of deviant behaviour (β = .36) and alcohol abuse (β = .24). A similar pattern of findings emerged among a different sample including older adolescents (783 Belgian adolescents aged 14 to 21).

Gender and risk level moderate delinquency outcomes of autonomy. In a longitudinal study following students in Florida from Grades 6-9 (N=1286), Van Gundy (2002) found that the assertion of autonomy[6] reduced the risk for crime among young women, but increased the risk for crime among young men. Boykin McElhancy and Allen (2001) conducted a similar study with 131 adolescents in Grade 9 and 10 (mean age 15.9) and their mothers, to examine the relationships between autonomy and adolescent functioning. For high-risk adolescents, higher autonomy was related to increased levels of self-reported delinquency (β = .44, $p < .01$), whereas the link was nonsignificant for low-risk adolescents. These findings suggest a need for greater guidance and structure in the lives of adolescents living in high-risk situations (and consequently less, rather than more, autonomy).

Autonomy has links with positive behavioural/social outcomes, such as active coping (actively searching for and accepting social support) and motivation. Seiffge-Krenke and Pakalniskiene (2011) conducted a 4-year longitudinal study with 196 German families with adolescents (mean age = 13.9)

[6] Assertion of autonomy is independence from, or lack of preoccupation with, others' attitudes about oneself.

to examine the relationships between autonomy support and coping behaviours. Parents and children did not directly affect each other's abilities to cope with family stress over time. Both the parents' and adolescents' perceptions of autonomy support were important in shaping their respective coping styles. Adolescents who reported high levels of autonomy support showed more active coping over time, reflective of studies involving late adolescents (Klink, Byars-Winston, & Bakken, 2008; McCarthy, Lambert, & Seraphine, 2004).

In terms of motivation, Vierling and colleagues (2007) conducted a study with 237 low socioeconomic Hispanic American early adolescents in Grade 5-8 (mean age = 12.11 years) to explore the relationships among autonomy-support, motivation, and physical activity. Students who perceived that their teachers and parents promoted autonomy-support toward physical activity experienced greater satisfaction of autonomy, competence, and relatedness. Satisfaction of these critical factors positively predicted autonomous motivation towards physical activity, which in turn positively accounted for 9% of the variance in physical activity and 15 % of the variance in reported positive attitudes about physical activity.

Risk may moderate social outcomes. For example, Soenens and Vansteenskiste (2005) examined relationships between autonomy support and social competence. Perceived autonomy-supportive parenting was related to friendship self-determination with significant indirect effects found from maternal autonomy support to social competence ($\beta = .10$, $p < .05$). Low-risk adolescents who exhibited autonomy with their mothers were more likely to have greater friendship competence ($\beta = .28$, $p < .05$) (Boykin McElhaney & Allen, 2001).

Summary

- Higher volition is related with reduced deviant behaviours and alcohol use from early to late adolescence;
- The level of adolescent risk moderates the link between autonomy and adolescent adjustment as well as the link between autonomy and social competence. For adolescents living in high-risk situations, more guidance and structure may be beneficial;
- Family autonomy support is positively related with active coping;
- Autonomy support from both parents and teachers is positively related to autonomous motivation for physical activity and increased engagement in physical activity.

Psychological/emotional outcomes

Somewhat divergent evidence about autonomy has emerged in criminology and mental health fields: over-emphasis on the self (autonomy without relatedness) can lead to anti-social behaviours, while emotional reliance (lack of autonomy) increases risk for negative psychological/emotional outcomes (Van Gundy, 2002). In the psychological/emotional domain, multiple dimensions of autonomy are associated with psychological and emotional well-being, which is measured by indicators of positive and negative affect and self-concept, vitality (i.e., sense of energy), and lack of depression.

The relationship between autonomy and positive affect is cross-cultural and is significant from early to late adolescence. In a study involving 515 Chinese adolescents (mean age = 15.50) and 567 North American adolescents (mean age = 14.17), Lekes and colleagues (2010) examined relationships among parenting, life goals, and well-being. Across societies, autonomy-supportive parenting (e.g.,

encouraging initiative, offering choices, being responsive, providing a rationale for rules, and acknowledging youth's perspectives) was associated with endorsement of intrinsic life goals, which, in turn, was associated with well-being. Well-being was measured through indicators of positive and negative affect and self-concept. Intrinsic life goals partially mediated the relationship between parental autonomy support and well-being. In their study with Belgian high school students, Van Petegem and colleagues (2013) also found that a dimension of autonomy, volition, predicted higher scores on indicators of well-being. Volition was a significant unique predictor of self-esteem (β = .51), depressive symptoms (β = -.44), and vitality (β = .32) (Van Petegem et al., 2013).

Similarly, in a sports context, Adie, Duda, and Ntoumanis (2008) tested a theoretical model of coach autonomy support, motivational processes, and well/ill being. Their study involved 539 British late adolescents (mean age = 22.75). Coach autonomy support predicted participants' basic need satisfaction for autonomy, competence, and relatedness. Basic need satisfaction predicted greater subjective vitality when engaged in sport. Athletes who perceived low levels of autonomy were more susceptible to feeling emotionally and physically exhausted from sport investment. Autonomy and competence partially mediated the path from autonomy support to subjective vitality.

Decision-making is an important practice of autonomy, and the importance and opportunity to be involved in decision-making changes throughout adolescent development (see Wray-Lake, Crouter, & McHale, 2010). Decision-making is linked to depression with this relationship potentially moderated by ethnicity and age. Gootman and Eccles (2007) analyzed a longitudinal dataset following 1,329 African-American and European-American adolescents from Grade 7 to post-high school graduation. Adolescents who perceived more decision-making opportunities from early to late adolescence had more self-esteem, although decision-making opportunities explained only a small proportion of the variance in self-esteem. More decision-making opportunities were related to less depression from middle to late adolescence for African Americans, whereas the opposite pattern was found for European American adolescents who initially had more decision-making opportunities in middle adolescence. Thus either too much or too little autonomy may be related to increased depression. For longer-term effects, age and gender may also play a role; for example, Gootman and Sameroff (2004) found that autonomy (as measured by involvement in decision-making during adolescence) was not related to male depression during adolescence, but did predict less depression during late adolescence (19-22 years). Van Gundy (2002) found that the assertion of autonomy reduced the risk for depression for both young women and men (β = -.07, $p < .001$). Autonomy did not moderate the effects of stress, such as transition to high school, on depression or crime.

Summary

- Autonomy-supportive parenting is positively related to adolescents establishing intrinsic life-goals;
- Volition is positively related to self-esteem and vitality (i.e., sense of energy);
- Autonomy support from coaches is predictive of subjective vitality;
- Decision-making opportunities are negatively related to depression. However, this relationship is moderated by ethnicity and number of decision-making opportunities;

Summary of Literature on Autonomy and Youth Outcomes

Autonomy is a critical factor for positive outcomes in cognitive/learning, behavioural/social, and psychological/emotional domains. Further, autonomy is a critical protective factor in terms of negative behavioural and psychological/emotional outcomes. In turn, these outcomes are associated with long-term well-being. Table 4.1 provides a summary of these autonomy outcomes. However, the connection between autonomy and outcomes is not consistent across research studies. The domain(s), timing, and amount of autonomy are critical for positive adolescent outcomes and long-term thriving depending on gender, age, and risk status. Furthermore, greater specificity with respect to type and dosage of autonomy may well prove beneficial for understanding different youth outcomes across adolescence.

Table 4.1: Summary table of outcomes associated with autonomy

Outcome domain	Autonomy dimension	Outcome measure	Long-term implication[7]
Cognitive/ Learning	Autonomy-supportive learning environments	School/activity performance Autonomous motivation for learning Deep processing	Achievement Life-long learning
	Perceived classroom autonomy	Student engagement	Achievement
	Autonomy support from teachers and parents	School achievement and competence Job exploration and commitment	Achievement Career development
Behavioural/ Social	Volition	Deviant behaviour Alcohol abuse	Responsible citizenship
	Autonomy	Delinquency	Responsible citizenship
	Family autonomy support	Active coping	Well-being
	Autonomy support from teachers and parents	Motivation for physical activity Behavioural engagement in physical activity	Physical health Life-long physical activity
Psychological/ emotional	Autonomy-supportive parenting	Intrinsic life-goals	Well-being
	Volition	Self-esteem Vitality	Well-being
	Autonomy support from coaches	Subjective vitality	Well-being and health
	Decision-making	Depression	Well-being

[7] Long-term implications indicate connections to thriving and well-being over time.

Chapter 4 References

[Starred studies are described in tabular form in Appendix Chapter 4.]

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