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Benefit finding and identity processes in type 1 diabetes: Prospective associations throughout adolescence

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Type 1 Diabetes



Intensive and time-consuming daily treatment:

- Insuline adminstration
- Blood glucose monitoring
- Dietary restrictions

Chronicity of diabetes: Implications for self-concept

- \rightarrow Challenging in adolescence and transition to adulthood
- → Balance between normative developmental tasks (identity formation!) and diabetes care
- \rightarrow Impact on individuation and integration



Testimony on website of Flemish Diabetes Association:

I am Kevin, 12 years old, and have been diagnosed with diabetes one year ago. Everything changed. I started looking differently at the world, at myself, my friends and family. If my friends ask me a question about my diabetes, I cannot stand it and simply do not answer.

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C Cambridge University Press, 2011

Original Article

Identity formation in adolescents with congenital cardiac disease: a forgotten issue in the transition to adulthood

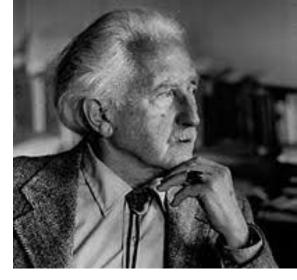
Koen Luyckx,^{1,*} Eva Goossens,² Carolien Van Damme,³ Philip Moons⁴, On behalf of the i-DETACH investigators

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Identity formation

Erikson's Stages of Psychosocial Development

Approximate Age	Psycho Social Crisis		
Infant - 18 months	Trust vs. Mistrust		
18 months - 3 years	Autonomy vs. Shame & Doubt		
3 - 5 years	Initiative vs. Guilt		
5 -13 years	Industry vs. Inferiority		
13 - 21 years	Identity vs. Role Confusion		
21- 39 years	Intimacy vs. Isolation		
40 - 65 years	Generativity vs. Stagnation		
65 and older	Ego Integrity vs. Despair		



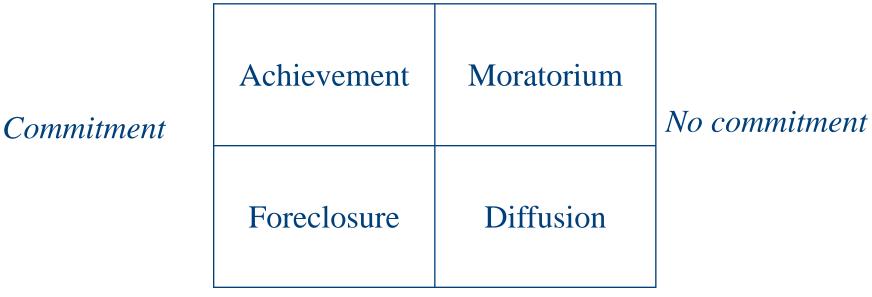
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Identity formation

Identity status paradigm (Marcia, 1966)

Exploration





No exploration

→ Focus on processes to obtain detailed understanding!

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Luyckx et al. (2008), Journal of Adolescent Health

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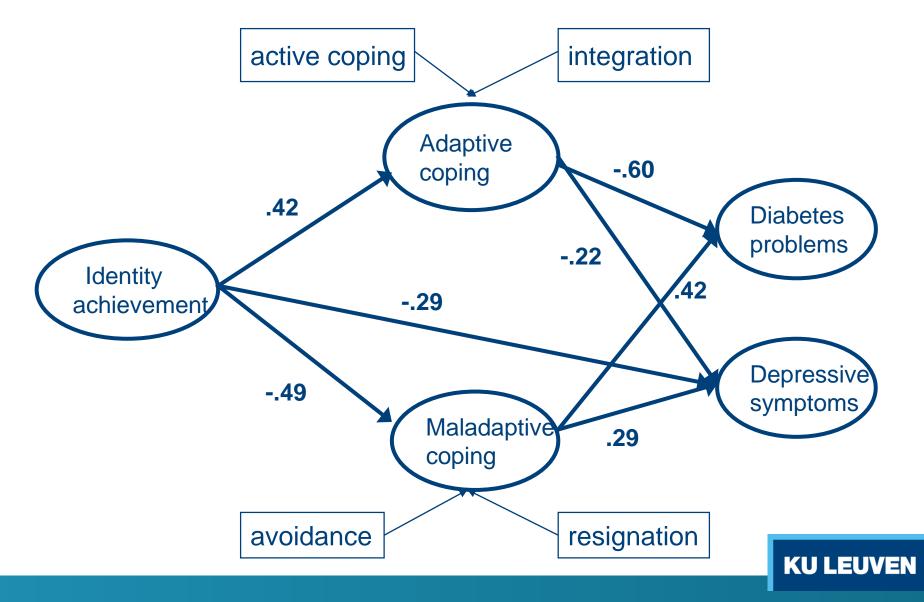
Identity and diabetes

- 194 emerging adults with type 1 diabetes
- 60% female
- M_{age} diagnosis = 15 years
- *M* HbA1c = 7.59
- → No differences on identity commitment with control sample, but lower scores on identity exploration
- \rightarrow Lowered exploration due to perceived restrictions on future possibilities?

Importance of exploration for developing a self-endorsed and autonomous identity!

Luyckx et al. (2008), Journal of Adolescent Health

Identity and diabetes

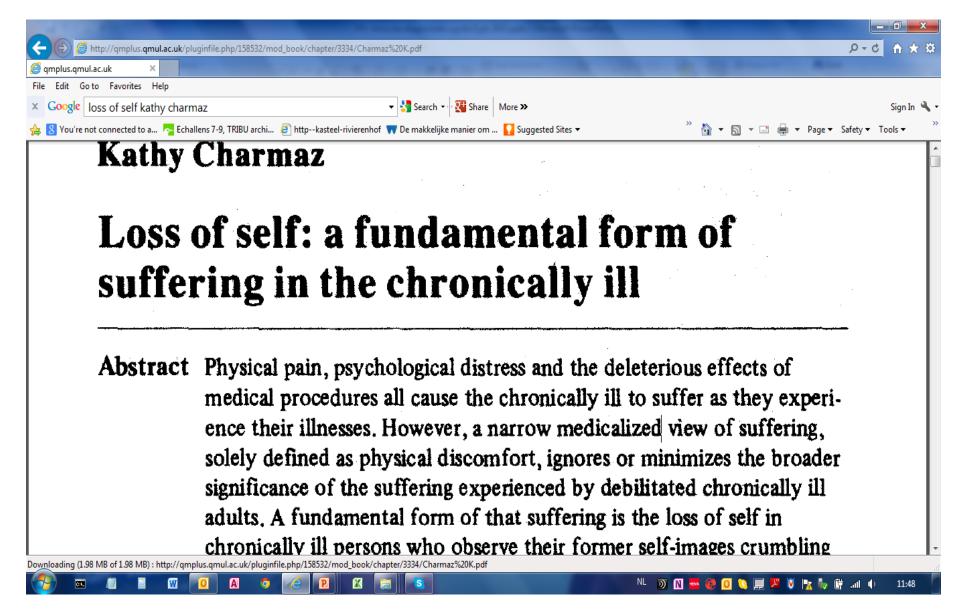


Benefit finding

Identity as internal resource for dealing with generic and illness-specific stressors

BUT...what about impact of diabetes on sense of self?





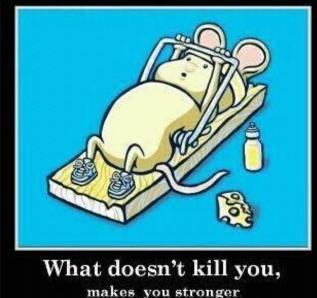


Benefit finding

Literature increasingly focuses on benefit finding (Helgeson, Lopez, & Mennella, 2009; Meyerson, Grant, Carter, & Kilmer, 2011):

- Positive changes as a result of chronic illness
- Chronic illness benefits one's sense of self
- Chronic illness enables one to grow as a person

Benefit finding as a process of meaning making and restructuring of the self in the face of adversity



Benefit finding

Girl, 18 years old, congenital heart disease

"If I wouldn't have had my illness, I would have a different outlook on life and I would have a different attitude towards things. I wouldn't be the person I am today and I wouldn't be as strong as I am today. So yes, I think this has made me a stronger person. It changes your perspective on things."

Present study

- Longitudinal examination of benefit finding and identity processes in type 1 diabetes
- Especially identity exploration affected by diabetes (Luyckx et al., 2008; Seiffge-Krenke, 2001)
- Role of benefit finding?

Main hypothesis:

Benefit finding through adolescence may function as resource for identity formation

→ Adolescents experiencing benefit finding perceive fewer restrictions on their future due to their illness and feel more competent in exploring alternatives



Sample and Design

- 55 adolescents (47% female) ages 10-14 (*M* = 13.49) at T1
- At T1, *M* illness duration 5.08 years (range 1.25-12.0)
- 55% on insulin pump
- Participated in 6-wave longitudinal study spanning 3 years
- Selected from larger sample (N = 252; PI: Cynthia Berg, Deb Wiebe) with identity data on T6

T1	T2	Т3	T4	Т5	Т6
Benefit	Benefit	Benefit	Benefit		Identity
finding	finding	finding	finding		processes

Measures

Benefit finding T1-4: measure by Tomich & Helgeson (2004)

- "Having diabetes has led me to be more accepting of things"
- α T1-4 = .89 .94

Identity processes T6: Ego Identity Process Questionnaire (Balistreri, Busch-Rossnagel, & Geisinger, 1995)

- "I don't expect to change my principles and ideals" (commitment)
- "I have consistently reexamined many different values in order to find the ones which are best for me" (exploration)
- $\alpha T6 = .77 \text{ and } .68$

<u>Depressive symptoms T1</u>: Children's Depression Inventory (Kovacs, 1985)

• α T1 = .84



Results

- Latent growth curve modeling T1-4 on benefit finding
 - Intercept and linear slope term
 - Mean and variance of quadratic slope term non-significant
- Adequate model fit (χ²(21) = 27.20 (*p* = .16), RMSEA = .073, SRMR = .054, CFI = 0.940)
- *Mean* intercept = 3.043 (*p* < .001); *Var* intercept = 0.490 (*p* < .001)
- *Mean* slope = -0.036 (*ns*); *Var* slope = 0.037 (*p* < .10)
- Intercept related to being female (r = .31; p < .05), HbA_{1c}-values (r = -.23; p < .10), and depressive symptoms (r = -.24; p < .10)

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Results

	Exploration T6	Commitment T6
Sex T1	.01	13
Age T1	.20	.04
Illness duration T1	.01	.06
Pump status T1	21	.07
$HbA_{1c}T1$.07	14
Depressive symptoms T1	.19	37**
Intercept benefit finding T1-4	.58***	07
Slope benefit finding T1-4	.37+	03

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Discussion

- Initial levels and changes in benefit finding were uniquely and positively related to identity exploration
- Benefit finding → a new sense of meaning emerges → enables patients to explore future possibilities

- → Benefit finding may help "adolescents to see a future unhindered by diabetes, and to select and pursue life goals that are compatible with their illness" (Tran et al., 2011, p. 218)
- \rightarrow Crucial as exploration is key to achieve autonomous identity



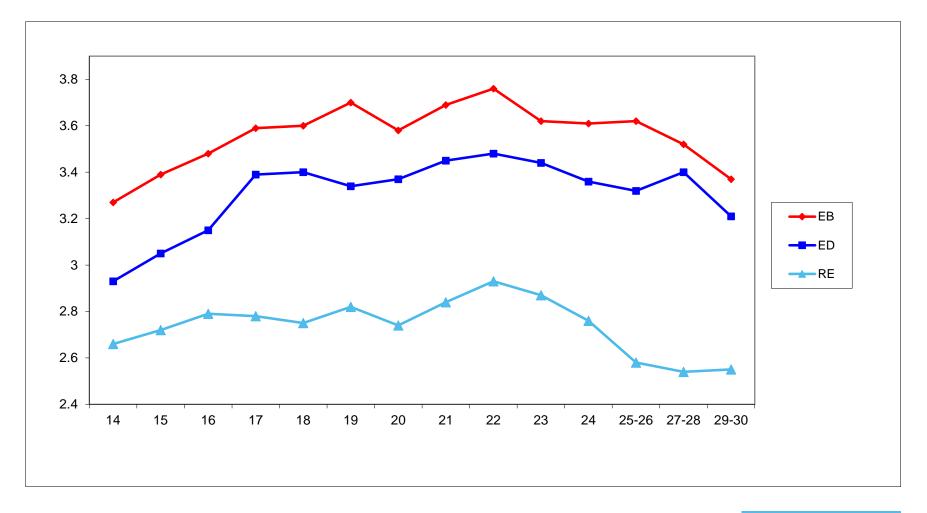
Limitations and suggestions

- Small sample with middle-class and Caucasian background
- Only self-reports
- No causal claims \rightarrow need to focus on bi-directional pathways
- Follow-up well into emerging adulthood given that identity exploration is prolonged into emerging adulthood
- Limited perspective on identity processes:
- → More recent process-oriented identity model (Luyckx et al., 2008): Especially distinction between adaptive and maladaptive or ruminative exploration is relevant



Luyckx et al. (2013), Social Development

Age trends exploration (N = 5,834)



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National Institute of Diabetes and Digestive and Kidney Diseases

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