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 administration
- Blood glucose monitoring
- Dietary restrictions

Chronicity of diabetes: Implications for self-concept

→ Challenging in adolescence and transition to adulthood
→ Balance between normative developmental tasks (identity formation!) and diabetes care
→ Impact on individuation and integration
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.
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.
Identity formation in adolescents with congenital cardiac disease: a forgotten issue in the transition to adulthood

Koen Luyckx, Eva Goossens, Carolien Van Damme, Philip Moons, On behalf of the i-DETACH investigators

1Faculty of Psychology and Educational Sciences, School Psychology and Child and Adolescent Development; 2Department of Public Health, Centre for Health Services and Nursing Research; 3Faculty of Psychology and
## Identity formation

### Erikson’s Stages of Psychosocial Development

<table>
<thead>
<tr>
<th>Approximate Age</th>
<th>Psycho Social Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant - 18 months</td>
<td>Trust vs. Mistrust</td>
</tr>
<tr>
<td>18 months - 3 years</td>
<td>Autonomy vs. Shame &amp; Doubt</td>
</tr>
<tr>
<td>3 - 5 years</td>
<td>Initiative vs. Guilt</td>
</tr>
<tr>
<td>5 - 13 years</td>
<td>Industry vs. Inferiority</td>
</tr>
<tr>
<td>13 - 21 years</td>
<td>Identity vs. Role Confusion</td>
</tr>
<tr>
<td>21 - 39 years</td>
<td>Intimacy vs. Isolation</td>
</tr>
<tr>
<td>40 - 65 years</td>
<td>Generativity vs. Stagnation</td>
</tr>
<tr>
<td>65 and older</td>
<td>Ego Integrity vs. Despair</td>
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</tbody>
</table>

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Identity formation

Identity status paradigm (Marcia, 1966)

**Exploration**

<table>
<thead>
<tr>
<th>Commitment</th>
<th>Achievement</th>
<th>Moratorium</th>
<th>No commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreclosure</td>
<td>Diffusion</td>
<td></td>
</tr>
</tbody>
</table>

→ Focus on processes to obtain detailed understanding!
Identity and diabetes

- 194 emerging adults with type 1 diabetes
- 60% female
- $M_{age\text{ diagnosis}} = 15\text{ years}$
- $M\text{ HbA1c} = 7.59$

→ No differences on identity commitment with control sample, but lower scores on identity exploration

→ Lowered exploration due to perceived restrictions on future possibilities?

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

Adaptive coping

Active coping
Integration

Maladaptive coping

Avoidance
Resignation

Diabetes problems
Depressive symptoms

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

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

BUT…what about impact of diabetes on sense of self?
Kathy Charmaz

Loss of self: a fundamental form of suffering in the chronically ill

Abstract  Physical pain, psychological distress and the deleterious effects of medical procedures all cause the chronically ill to suffer as they experience their illnesses. However, a narrow medicalized view of suffering, solely defined as physical discomfort, ignores or minimizes the broader significance of the suffering experienced by debilitated chronically ill adults. A fundamental form of that suffering is the loss of self in chronically ill persons who observe their former self-images crumbling.
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

<table>
<thead>
<tr>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit finding</td>
<td>Benefit finding</td>
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<td>Benefit finding</td>
<td>Identity processes</td>
</tr>
</tbody>
</table>
Measures

**Benefit finding T1-4**: measure by Tomich & Helgeson (2004)
- “Having diabetes has led me to be more accepting of things”
- $\alpha_{T1-4} = .89 - .94$

**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)
- $\alpha_{T6} = .77$ and $.68$

**Depressive symptoms T1**: Children’s Depression Inventory (Kovacs, 1985)
- $\alpha_{T1} = .84$
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 ($\chi^2(21) = 27.20$ ($p = .16$), 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 ($r = -.24$; $p < .10$)
### Results

<table>
<thead>
<tr>
<th></th>
<th>Exploration T6</th>
<th>Commitment T6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex T1</td>
<td>.01</td>
<td>-.13</td>
</tr>
<tr>
<td>Age T1</td>
<td>.20</td>
<td>.04</td>
</tr>
<tr>
<td>Illness duration T1</td>
<td>.01</td>
<td>.06</td>
</tr>
<tr>
<td>Pump status T1</td>
<td>-.21</td>
<td>.07</td>
</tr>
<tr>
<td>HbA$_{1c}$ T1</td>
<td>.07</td>
<td>-.14</td>
</tr>
<tr>
<td>Depressive symptoms T1</td>
<td>.19</td>
<td>-.37**</td>
</tr>
<tr>
<td>Intercept benefit finding T1-4</td>
<td>.58***</td>
<td>-.07</td>
</tr>
<tr>
<td>Slope benefit finding T1-4</td>
<td>.37+</td>
<td>-.03</td>
</tr>
</tbody>
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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).

→ 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 → 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
Age trends exploration \((N = 5,834)\)

Luyckx et al. (2013), *Social Development*
Acknowledgements

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