# CHAPTER 6: COMPETENCE

## Defining Competence

Competence can be defined as knowing how to handle situations effectively. Competence is not an absence of deficits, problems, and pathology, but rather the presence of well-developed clusters of attributes, abilities, and skills (Park & Peterson, 2006) and an "effective human functioning in attainment of desired and valued goals" (Baumrind, 1998, p. 13).

Competence in children and youth is commonly understood as the experience of behaviour as effectively enacted (e.g., youth feel competent when they feel able to meet the challenges of a certain assignment) (Niemiec & Ryan, 2009). In other words, competence refers to the development of skills to perform tasks successfully (House, Bates, Markham, & Lesesne, 2010). Competence is positioned as a desirable outcome in Pittman, Irby, Tolman, Yohalem, and Ferber's (2003) model of Desirable Youth Outcomes.[11] In this conceptualization, the construct of competence entails: *knowledge* (developing and reflecting on one's knowledge and experiences); *skills* (developing a range of skills across developmental areas such as health, civic, physical, social, emotional, cognitive, and personal); and *behaviour* (applying and practicing new life skills and new roles). Similarly, Self-Determination Theory (SDT) considers competence or effectance to be one of the three fundamental psychological needs[12] that can energize human activity and must be satisfied for long-term psychological health, defined as ongoing psychological growth, integrity, and well-being (Deci & Ryan, 2000), although competence in SDT is seen subjectively. Competence has both an objective component (how well one can accomplish a given task) and a subjective component (how one feels about the likelihood of accomplishing a given task in domain-specific areas [e.g., social, academic, cognitive, vocational]).

As one of the Five Cs[13] of Positive Youth Development (PYD), competence is regarded as a healthy outcome of adaptive development (Eccles & Gootman, 2002; Lerner, Lerner et al., 2005; Lerner, Dowling, & Anderson, 2003; Roth & Brooks-Gunn, 2003). Competence is developed through opportunities for skill-building and mastery of physical, intellectual, psychological, emotional, social, and cultural skills. These opportunities are considered crucial features of positive developmental settings, as they allow youth to build social/cultural capital for future thriving (Eccles & Gootman, 2002).

In a factor analytic study, Bowers and colleagues (2010) examined the theoretical strength of competence as one of the Five Cs of Positive Youth Development (PYD). Initially, the researchers proposed that competence was comprised of a youth's subjective views of his or her actions in the academic, social, and athletic domains in combination with objectively measured school grades. When this model was tested, athletic competence was a not a strong indicator of overall competence and was excluded from later analyses. The final model in their study consisted of perceived level of academic competence, school grades, and perceived level of social competence as the key components of competence among eighth, ninth, and tenth graders. Overall, competence was a significant component of the 5 C's framework of positive youth development (Bowers et al., 2010).

Catalano Hawkins, Berglund, Pollard, and Arthur (2002) identified five competence constructs of PYD: cognitive, emotional, social, behavioural, and moral competence.

---

[11] Desirable Youth Outcomes: Confidence, Character, Connection, Competence, and Contribution.
[12] Competence, Autonomy, and Relatedness
[13] The Five Cs: Competence, Confidence, Connection, Character, Caring/compassion

- *Cognitive competence:* a) Self-awareness, interpreting social cues and understanding different perspectives, problem-solving, and decision-making; and b) academic and intellectual skills such as analytic thinking and abstract reasoning;
- *Emotional competence:* Knowing and managing one's emotions, recognizing others' emotions, handling relationships;
- *Social competence:* Interpersonal skills, such as communication skills, conflict-resolution, and negotiation strategies;
- *Behavioural competence:* Non-verbal communication, verbal communication, taking action;
- *Moral competence:* Ability to assess and respond to ethical, affective, or social justice dimensions of a situation, such as empathy and moral awareness.

Park and Peterson (2006) defined moral competence as "the knowledge, ability, and motivation to pursue and to do good effectively" (p. 892). Moral competence is interrelated with and guides other competences (Park, 2004; Park & Peterson, 2006).

Social competence is complemented by *cultural competence*, commonly understood as the ability of individuals to work or respond effectively across cultures in a way that acknowledges and respects the culture of other persons. Cultural competence is manifested through a young person's knowledge of and comfort with people of diverse cultural/racial/ethnic backgrounds (Scales, Benson, Roehlkepartain, Sesma, & van Dulmen, 2006). Cultural competence moves beyond the concepts of "cultural awareness" (knowledge about a particular group primarily gained through reading or studies) and "cultural sensitivity" (knowledge as well as some level of experience with a group other than one's own), focusing on the fact that some level of skill development must occur (Messina, 1994). Gaining cultural competence is a long-term process through which individuals develop a mixture of beliefs/attitudes, knowledge, and skills that help them establish trust and communicate with others.

## Outcomes

There is extensive evidence that increases in a range of competences predict positive outcomes for adolescents in the cognitive/learning, behavioural/social, and psychological/emotional domains. For instance, Durlak Weissberg, Dymnicki, Taylor, and Schellinger (2011) conducted a meta-analysis of Social and Emotional Learning (SEL) interventions to build social and emotional competence involving 270,234 students from Kindergarten through high school. Social skills include abilities such as clear communication, active listening, resisting inappropriate social pressure, and seeking and offering help when needed. Emotional skills include abilities such as recognizing and regulating one's emotions, and empathizing with others. Compared to controls, participants benefited from improved social and emotional skills (effect size = 0.57), attitudes (effect size = 0.23), social behaviours (effect size = 0.24), and academic performance (effect size = 0.27, which translates into an 11 percentile point gain in academic achievement).

### Cognitive/learning outcomes

Competence is generally operationalized as self-perceptions, using measures of skill-related self-attitudes (e.g., hope and self-esteem). For example, Ciarrochi, Heaven, and Davies (2007) examined perceptions of competence through indicators of self-esteem, hope, and positive attributional style, and their predictive relationships with future grades and teacher-rated adjustment. This longitudinal study surveyed students in the middle of their first year of high school and again one year later. Using coded questionnaires, the researchers were able to directly match the Time 1 and 2 data of more than 600 students (ranges from 635 [for hostility] to 657 for several school subjects). Hope, in terms of how students felt they were doing and their confidence in problem solving, was the best predictor of grades ($T = 3.57$, $p < .001$). Using the same data set in a subsequent study, Leeson, Ciarrochi, and Heaven (2008) examined the relationships among cognitive ability, positive thinking, and academic

achievement. Over and above cognitive ability, hope predicted better academic performance ($b = .09$, $t = 2.80$, $p < .01$). Similarly, Daniels et al. (2009) conducted a predictive study with adolescents transitioning into first-year university (N=669), a new achievement setting, to examine the relationships between hopefulness and mastery goals[14] and achievement outcomes. Hopefulness, or the encouraging outlook students had about their performance, predicted mastery goals ($b = .20$, $p < .001$). Mastery goals predicted enjoyment, which, in turn, predicted achievement. Overall, this model explained 22% of variance in achievement (final course grade and GPA).

In a longitudinal study, Stepp, Pardini, Loeber, and Morris (2011) followed boys living in inner-city Pittsburgh from age 13 - 25 (N=257) to examine trajectories of adolescent social competence as a resilience factor among at-risk youth. Social competence had a direct effect on educational attainment in early adulthood: boys who developed social competence in adolescence went further in school irrespective of their involvement with delinquent peers. Growth in social competence across adolescence predicted higher educational attainment and lower serious delinquency during young adulthood.

**Summary**

- Self-perceived competence has been associated with academic achievement and performance;
- Hope, as a proxy for perceived competence, may be an important construct in understanding competence;
- Social competence has been related with higher subsequent educational attainment;
- Findings are relatively consistent across age groups and settings.

**Behavioural/social outcomes**

Multiple competences serve as protective factors for behavioural problems. Behavioural problems are measured by indicators of deviancy and delinquency, delayed sexual initiation and reduced unplanned pregnancy, and drug use. Social and cultural competences in particular predict positive behavioural and social outcomes.

Several cross-sectional studies with children under the age of 12 confirm a relatively high negative association between social competence and antisocial behaviour (see, for example LaFreniere, Masataka et al., 2002). Sorlie, Hagen, and Ogden (2008) conducted a longitudinal study following 391 Norwegian middle school students in 8th grade and then again in 10th grade, as well as ratings from their parents and teachers, to examine relationships between social competence and antisocial behaviour. Low social competence at age 13 predicted antisocial behaviour at age 15 ($\gamma = -.33$, $p < .05$). Similarly, a longitudinal study (Stepp, Pardini, Loeber, & Morris, 2011) found that high-risk boys with high levels of social competence decreased their involvement with deviant peers throughout adolescence, which predicted less serious forms of delinquency in early adulthood.

In a systematic review of 116 studies, House, Bates, Markham, and Lesesne (2010) found sufficient and consistent evidence that cognitive competence and behavioural/social competence are protective factors for adolescent sexual and reproductive health outcomes. Specifically, academic

[14] Mastery goals are intentions to improve and learn skills.

ability/achievement was associated with delaying sexual initiation for all youth, as well as with increases in the use of contraceptives for female adolescents. One behavioural/social competence construct, partner sexual communication, was associated with increases in the use of contraceptives for female adolescents only. There was insufficient evidence to draw conclusions about the relationship between emotional and moral competence and adolescent sexual and reproductive health.

In an older study, Botvin, Baker, Dusenbury, Botvin, and Diaz (1995) used a longitudinal randomized control trial to examine drug use behaviours associated with social competence development. The researchers followed 3597 White middle-class students from 56 schools in New York State over six years starting in Grade 7. Students participated in a drug prevention program during Grade 7, with booster sessions in Grades 8 and 9 that involved building general life skills to enhance individual competence and reduce vulnerability to drug use influences. The program provided skills to build cognitive, behavioural, and social competences including skills for building self-esteem, resisting advertising, managing anxiety, developing personal relationships, and asserting rights. Students who participated in the intervention had significant reductions in both drug and polydrug use relative to controls: up to 44% fewer drug users and 66% fewer polydrug (tobacco, alcohol, and marijuana) users. Monthly and weekly cigarette smoking rates were 15%-27% lower and heavy smoking was 25% lower in intervention subjects than control subjects. Although the effect size was moderate, these results provided strong evidence of the efficacy of the intervention.

Scales, Benson, Leffert, and Blyth (2010) investigated the contribution of developmental assets to thriving behaviours among adolescents. The researchers focused on outcomes of adolescent well-being or thriving, a concept that incorporated not only the absence of problem behaviours or other signs of pathology, but also the signs or indicators of healthy development. The seven thriving indicators were: (a) school success, (b) leadership, (c) helping others, (d) maintenance of physical health, (e) delay of gratification, (f) valuing diversity, and (g) overcoming adversity. The study involved students in Grades 6-12 (N=6000) evenly distributed across 6 ethnic groups. For at least three racial-ethnic groups of youth, cultural competence predicted the thriving index. For White youth, cultural competence was especially important for predicting thriving. Cultural competence specifically predicted four thriving outcomes: 1) valuing diversity (for all racial-ethnic groups); 2) physical health (for all racial-ethnic groups except multiracial youth); 3) delay of gratification (for American Indian and African-American youth); and 4) leadership (for Asian-American, White, and multiracial youth).

**Summary**

- Social competence is related to lower rates of antisocial behaviour, delinquency, and drug use;
- Cognitive and behavioural/social competence is associated with delayed sexual initiation and increased use of contraceptives;
- Cultural competence is associated with valuing diversity, increased physical health, delay of gratification, and leadership.
- These findings are relatively independent of gender differences and somewhat independent of racial differences.

**Psychological/emotional outcomes**

In the psychological/emotional domain, competence is associated with psychological and emotional well-being. Psychological well-being is indicated by the presence of life satisfaction, self-esteem, vitality, emotional regulation, and positive affect. It is related to the absence or reduction of distress, anxiety, mental disorders, depression, and burnout.

Competence can serve to promote resilience by increasing psychological well-being over time. In a 3-year longitudinal study, Griffin, Botvin, Scheier, Epstein, and Doyle (2002) investigated the relationship among personal competence, psychological distress and well-being, and substance use with a predominantly ethnic minority sample of junior high school students (Grades 7-9) in New York City (N=1184). Greater personal competence, involving cognitive (e.g., decision-making) and behavioural (e.g., self-regulation) skills, predicted less distress ($r = -.17$, $p < .001$) and greater well-being ($r. = .29$, $p < .001$) over time. In turn, greater well-being predicted less subsequent substance use ($\beta = -.08$, $p < .05$). Similarly, Holopainen, Lappalainen, Juntilla, and Savolainen (2011) followed an entire age group of adolescents (N=412) from Grade 9 -12. Social competence (specifically cooperation skills) predicted later well-being as measured by higher self-esteem, and absence of depression and burnout ($\beta = .13$), when controlling for earlier levels of psychological well-being.

Perceived competence is important for psychological and emotional well-being. Perceptions of competence and a belief of success, measured by indices of hope, predicted future positive affect ($T=3.26$, $p <.01$) in a sample of Australian early adolescents (Ciarrochi, Heaven, & Davies, 2007). This result replicated previous longitudinal studies. For example, a longitudinal study with high school students found that hope positively correlated with life satisfaction assessed one year later (Valle, Huebner, & Suldo, 2006). In another longitudinal study, Pedersen and Seidman (2004) examined the relationships between perceived sport competence in early adolescence and self-esteem in middle adolescence among ethnically diverse, urban American girls (N=247). The study followed the girls through the transition from middle school (mean age = 13.15 years) to high school (mean age = 16.43), during a point in girls' trajectory when athletic interest and perceptions of competence tend to decline. Only when perceived team competence was developed did sport participation subsequently have a positive influence on self-esteem; the relationship between sports participation and self-esteem was partially mediated by self-evaluations of team competence, which accounted for a significant but small amount of variance ($F(1,239) = 5.12$, $p < .05$, $\Delta R^2 = .02$).

In a similar study focusing on physical competence with late adolescents, physical competence, body image, and instrumentality[15] mediated the relationships between high school sport involvement and college well-being (Greenleaf, Boyer, & Petrie, 2009). This model accounted for 60% of variance in psychological well-being in the sample of 260 female undergraduate students in southern United States. Likewise, Adie and colleagues (2008) found that competence partially mediated the pathway from coach autonomy support to athletes' subjective vitality (i.e., degree to which participants felt alive and energetic when playing their team sport).

Emotional competence as well has been related to psychological well-being. Mavroveli, Petrides, Rieffe, and Bakker (2007) studied the relationships between self-rated emotional competence (trait emotional intelligence) and well-being for 282 Dutch adolescents (11-15 years). Emotional intelligence (EI) was positively associated with adaptive coping styles ($r = .347$, $p < .01$) and negatively associated with depressive thoughts ($r = -.604$, $p < .01$). In an experimental study, Nelis and colleagues (2011) examined emotional competence and its correlates among a sample of 92

[15] Instrumentality is the "tendency to approach the world with a self-determining, assertive attitude" (Greenleaf et al., 2009, p. 715).

undergraduate women (21 of whom were part of a control group). The emotional competence intervention consisted of 18 hours of in-session time enhancing skills to understand emotions, identify and regulate one's own and others' emotions, and use positive emotions to foster well-being. Increasing emotional competence improved psychological well-being, with increases in emotional regulation ($d = 0.61$) and life satisfaction ($d = 0.59$) and a decrease in mental disorders ($d = 0.62$). In a 3-year longitudinal study with 163 Australian first year undergraduate students (mean age = 21.47), measures of emotional competence predicted subsequent well-being (Ciarrochi & Scott, 2006). Difficulty in describing emotions uniquely predicted increases in anxiety ($\beta = .22$, $p < .001$) and decreases in positive affect ($\beta = -.28$, $p = .05$). Difficulty managing emotions also predicted decreases in positive affect ($\beta = -.29$, $p = .05$).

**Summary**

- Cognitive and behavioural competence is related with less distress, greater psychological well-being, and subsequent decreases in substance use;
- Hope, as a proxy for perceived competence, and emotional competence are associated with positive affect and life satisfaction;
- Social and physical competence are related to higher self-esteem, and the latter is associated with subsequent sport participation;
- Emotional competence is associated with adaptive coping, positive affect, life satisfaction as well as reduced depressive thoughts, anxiety, and mental disorders.

## Summary of Literature on Competence and Youth Outcomes

Competence is a critical factor for positive outcomes in cognitive/learning, behavioural/social, and psychological/emotional domains. However, the competences are culturally mediated and therefore different competences may be more important in some cultures than in others (Eccles & Gootman, 2002), with limited evidence to indicate that there are competences that are universal. Greater specificity about the outcomes related to type of competence, and their relevance for various cultures and ethnic backgrounds, as well as across age and risk level, may prove beneficial for understanding different outcomes across adolescence.

Competence is a critical protective factor for negative behavioural and psychological outcomes. Table 6.1 provides a summary of these competence outcomes. Specific competences, and self-perceptions of those competences, are related to different positive adolescent outcomes. Although social competence or skills are remarkably important, so too are social connections, social character, social confidence, and social contributions (Pittman et al., 2003). Therefore, competence cannot be fully understood in a vacuum, but in relation with other critical factors in youth and adulthood.

**Table 6.1: Summary table of outcomes associated with competence**

| Outcome domain | Competence dimension | Outcome measure | Long-term implication[16] |
|---|---|---|---|
| **Cognitive/ learning** | Self-perceived competence | Academic achievement and performance | Achievement |
| | Social competence | Educational attainment | Employment |
| **Behavioural/ social** | Social competence | Lower rates of antisocial behaviour and delinquency | Responsible citizenship |
| | Cognitive, behavioural, & social competence | Delaying sexual initiation and increased use of contraceptives | Health |
| | Social competence | Reductions in drug and polydrug use | Health |
| | Cultural competence | Valuing diversity, physical health, delay of gratification, and leadership | Responsible citizenship |
| **Psychological/ emotional** | Cognitive and behavioural competence | Less distress and greater psychological well-being | Less substance use |
| | Social competence | Higher self-esteem<br>Absence of depression and burnout | Psychological well-being |
| | Perceived competence | Positive affect<br>Life satisfaction | Life satisfaction |
| | Physical competence | Self-esteem | Well-being and physical activity |
| | Emotional competence | Adaptive coping, positive affect, and life satisfaction<br>Reduced depressive thoughts, anxiety, and mental disorders | Psychological well-being |

[16] Long-term implications indicate links to thriving and well-being over time.

## Chapter 6 References

*[Starred studies are described in tabular form in Appendix Chapter 6.]*


Adie, J. W., Duda, J. L., & Ntoumanis, N. (2008). Autonomy support, basic need satisfaction and the optimal functioning of adult male and female sport participants: A test of basic need theory. *Motivation and Emotion, 32,* 189-199.

Baumrind, D. (1998). Reflections on character and competence. In A. Colby, J. James, & D. Hart (Eds.), *Competence and character through life* (pp. 1-28). Chicago, IL: University of Chicago Press.

*Botvin, G. J., Baker, E., Dusenbury, L., Botvin, E. M., & Diaz, T. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association, 273*, 1106-1112.

Bowers, E. P., Li, Y., Kiely, M. K., Brittian, A., Lerner, J. V., & Lerner, R. M. (2010). The Five Cs model of Positive Youth Development: A longitudinal analysis of confirmatory factor structure and measurement invariance. *Journal of Youth and Adolescence, 39*, 720-735.

Catalano, R. F., Hawkins, J. D., Berglund, L., Pollard, J. A., & Arthur, M. W. (2002). Prevention science and positive youth development: Competitive or cooperative frameworks? *Journal of Adolescent Health, 31(Suppl 6)*, 230-239.

*Ciarrochi, J., Heaven, P. C. L., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality, 41*, 1161-1178.

Ciarrochi, J., & Scott, G. (2006). The link between emotional competence and well-being: A longitudinal study. *British Journal of Guidance & Counselling, 34*, 231-243.

Daniels, L. M., Stupnisky, R. H., Pekrun, R., Haynes, T. L., Perry, R. P., & Newall, N. E. (2009). A longitudinal analysis of achievement goals: From affective antecedents to emotional effects and achievement outcomes. *Journal of Educational Psychology, 101*, 948-963.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405-432.

Eccles, J. S., & Gootman, J. A. (2002). *Community programs to promote youth development.* Washington, DC: National Academies Press.

Greenleaf, C., Boyer, E. M., & Petrie, T. A. (2009). High school sport participation and subsequent psychological well-being and physical activity: The mediating influences of body image, physical competence, and instrumentality. *Sex Roles, 61*, 714-726.

*Griffin, K. W., Botvin, G. J., Scheier, L. M., Epstein, J. A., & Doyle, M. M. (2002). Personal competence skills, distress, and well-being as determinants of substance use in a predominantly minority urban adolescent sample. *Prevention Science, 3*, 23-33.

*Holopainen, L., Lappalainen, K., Juntilla, N., & Savolainen, H. (2011). The role of social competence in the psychological well-being of adolescents in secondary education. *Scandinavian Journal of Educational Research, 56*, 199-212.

House, L. D., Bates, J., Markham, C. M., & Lesesne, C. (2010). Competence as a predictor of sexual and reproductive health outcomes for youth: A systematic review. *Journal of Adolescent Health, 46*, S7-S22.

LaFreniere, P., Masataka, N., Butovskaya, M., Chen, Q., Dessen, A. A. … Frigero, A. (2002). Cross-cultural analysis of social competence and behavior problems in preschoolers. *Early Education and Development, 2*, 201-219.

Leeson, P., Ciarrochi, J., & Heaven, P.C. L. (2008). Cognitive ability, personality, and academic performance in adolescence. *Personality and Individual Differences, 45*, 630-635.

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive Youth Development: Thriving as the basis of personhood and civil society. *Applied Developmental Science, 7*, 172-180.

Lerner, R. M., Lerner, J. V., Almerigi, J., Theokas, C., Phelps, E. … von Eye, A. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*, 17-71.

Mavroveli, S., Petrides, K. V., Rieffe, C., & Bakker, F. (2007). Trait emotional intelligence, psychological well-being and peer-rated social competence in adolescence. *British Journal of Developmental Psychology, 25*, 263-275.

Messina, S. A. (1994). *A youth leader's guide to building cultural competence*. Washington, DC: Advocates for Youth.

*Nelis, D., Kotsou, I., Quoidbach, J., Hansenne, M., Weytens, F., Dupuis, P., & Mikolajczak, M. (2011). Increasing emotional competence improves psychological and physical well-being, social relationships, and employability. *Emotion, 11*, 354-366.

Niemiec, C. P., & Ryan, R. M. (2009). Applying self-determination theory to educational practice. *Theory and Research in Education, 7*, 133-144.

Park, N. (2004). Character strengths and positive youth development. *Annals of the American Academy of Political and Social Science, 591*, 40-54.

Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence, 29*, 891-909.

*Pedersen, S. & Seidman, E. (2004). Team sports achievement and self-esteem development among urban adolescent girls. *Psychology of Women Quarterly, 28*, 412-422.

Pittman, K. J., Irby, M., Tolman, J., Yohalem, N., & Ferber, T. (2003). *Preventing problems, promoting development, encouraging engagement: Competing priorities or inseparable goals*. Washington, DC: Forum for Youth Investment.

Roth, J. L., & Brooks-Gunn, J. (2003). Youth development programs: risk, prevention and policy. *Journal of Adolescent Health, 32*, 170-182.

*Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2010). Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science, 4*, 27-46.

Scales, P. C., Benson, P. L., Roehlkepartain, E. C., Sesma, A. J., & van Dulmen, M. (2006). The role of developmental assets in predicting academic achievement: A longitudinal study. *Journal of Adolescence, 29*, 691-708.

*Sorlie, M., Hagen, K. A., & Ogden, T. (2008). Social competence and antisocial behavior: Continuity and distinctiveness across early adolescence. *Journal of Research on Adolescence, 18*, 121-144.

*Stepp, S. D., Pardini, D. A., Loeber, R., & Morris, N. A. (2011). The relation between adolescent social competence and young adult delinquency and educational attainment among at-risk youth: The mediating role of peer delinquency. *Canadian Journal of Psychiatry, 56*, 457-465.

Valle, M. F., Huebner, E. S., & Suldo, S. M. (2006). An analysis of hope as a psychological strength. *Journal of School Psychology, 44*, 393-406.