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### Extending transformational leadership theory to parenting and adolescent health behaviours: an integrative and theoretical review

Katie L. Morton<sup>a</sup>; Julian Barling<sup>b</sup>; Ryan E. Rhodes<sup>c</sup>; Louise C. Mâsse<sup>d</sup>; Bruno D. Zumbo<sup>e</sup>; Mark R. Beauchamp<sup>a</sup>

<sup>a</sup> School of Human Kinetics, The University of British Columbia, Vancouver, BC, Canada <sup>b</sup> School of Business, Queen's University, Kingston, ON, Canada <sup>c</sup> Behavioural Medicine Laboratory, School of Exercise Science, University of Victoria, Victoria, BC, Canada <sup>d</sup> Department of Pediatrics, Faculty of Medicine, The University of British Columbia, Vancouver, BC, Canada <sup>e</sup> Department of Educational and Counselling Psychology, The University of British Columbia, Vancouver, BC, Canada

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## Extending transformational leadership theory to parenting and adolescent health behaviours: an integrative and theoretical review

Katie L. Morton<sup>a</sup>, Julian Barling<sup>b</sup>, Ryan E. Rhodes<sup>c</sup>, Louise C. Mâsse<sup>d</sup>,  
Bruno D. Zumbo<sup>c</sup> and Mark R. Beauchamp<sup>a\*</sup>

<sup>a</sup>*School of Human Kinetics, The University of British Columbia, Vancouver, BC, Canada;*

<sup>b</sup>*School of Business, Queen's University, Kingston, ON, Canada;* <sup>c</sup>*Behavioural Medicine Laboratory, School of Exercise Science, University of Victoria, Victoria, BC, Canada;*  
<sup>d</sup>*Department of Pediatrics, Faculty of Medicine, The University of British Columbia, Vancouver, BC, Canada;* <sup>e</sup>*Department of Educational and Counselling Psychology, The University of British Columbia, Vancouver, BC, Canada*

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*Parenting* is a critical social determinant of the health-related behaviours of adolescents. In this article, we argue that extending transformational leadership theory to parenting presents an opportunity for developing a useful conceptual model for (a) understanding the relationships between parenting and adolescents' health behaviours and (b) supporting the development of parenting interventions. First, we provide a brief review of the extant literature on parenting *styles* and *practices* as it relates to adolescent health. Second, after drawing parallels between parents and leaders, we provide a synopsis of transformational leadership theory, and explain the conceptual utility of this framework for understanding and evaluating parenting behaviours. Third, we draw from the leadership and behavioural medicine literatures to outline potential psychological mechanisms through which transformational parenting might predict adolescent health-related behaviours. We conclude by discussing opportunities for the implementation of evidence-based transformational parenting intervention research designed to support parenting behaviours.

**Keywords:** transformational leadership; parenting styles; adolescent health; behavioural medicine

Adolescence is a critical period for the adoption of health behaviours that have long-term consequences (Williams, Holmbeck, & Greenley, 2002), as it is during this life stage that many positive health-enhancing behaviours such as diet and exercise are consolidated, and important health-compromising behaviours such as smoking and substance abuse first emerge. While research has uncovered a range of predictors associated with adolescent health behaviours (Jessor, Turbin, & Costa, 1998; Neumark-Sztainer, 1999), arguably the family remains one of the most influential social determinants of adolescent health (Sallis & Nader, 1988).

Family members, especially parents, represent potential models of appropriate behaviour, gatekeepers to health-related opportunities and major sources of support for diverse health-related values and behaviours. Of particular interest, a growing body

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\*Corresponding author. Email: mark.beauchamp@ubc.ca

of research has demonstrated that the influence of parents on the behaviours and decisions of their children does not diminish as children mature into adolescents (Blum & Rinehart, 2000; Steinberg, 2001). At the same time, the transition from childhood into adolescence often coincides with a decline in physical activity (Boreham & Riddoch, 2001; Kimm et al., 2002), the adoption of less healthy diets (Lytle, Seifert, Greenstein, & McGovern, 2000; Neumark-Sztainer, 1999) and an increased incidence of illicit drug use, smoking and alcohol consumption (Madu & Matla, 2003). Clearly, adolescence represents a major foundation for lifelong health behaviours, and identifying and understanding its substantive influences is of critical importance.

In this paper, we first provide a brief review of the adolescent health literature as it relates to parenting styles and practices. We limit the scope of this review to youth aged 10–18 (American Psychological Association [APA], 2002),<sup>1</sup> and only include studies that discuss actual health behaviours (e.g., not mental health outcomes, such as depression), and exclude papers that focus on parenting and adolescent health behaviours in clinical populations (e.g., adolescents with diabetes). We then introduce Bass and Riggio's (2006) transformational leadership theory, and explain how the adoption of *transformational parenting* behaviours may positively influence adolescent health. Indeed, this paper is not intended to be a systematic review of the entire parenting literature, but an integrative and theoretical review that explains how transformational leadership theory (Bass & Riggio, 2006) can be used as a viable and conceptually salient framework for understanding and potentially fostering parenting behaviours that positively influence adolescent health.

### **Parenting styles and parenting practices**

Research on parenting has its origins in developmental psychology, where researchers examined the influence of distinct types of parenting styles (e.g., typologies characterised by responsiveness and demandingness) and specific parental practices (e.g., parental monitoring) in relation to a vast range of developmental outcomes. Within this literature, researchers have often used the labels 'parenting styles' and 'parenting practices' interchangeably (Maccoby & Martin, 1983); however, it has been suggested that to better understand the processes of parental influence, it is essential to distinguish between the two terms (Darling & Steinberg, 1993). Parenting styles differ conceptually from parenting practices in so far as parenting styles are pervasive across a wide range of parent–child interactions, whereas parenting practices are context-specific. In this section, we consider the most prominent findings in the parenting literature as they pertain to adolescent health behaviours, using Darling and Steinberg's (1993) distinction between parenting styles and practices. The selection of topics is not intended to be exhaustive, but instead represents the most salient areas in the parenting psychology literature where transformational leadership theory may be fruitfully applied.

### ***Parenting styles***

Parenting styles represent 'constellations of parental attitudes, values, practices and non-verbal expressions that characterise the nature of parent–child interactions across diverse situations' (Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997, pp. 507–508). Early writing on parenting styles examined numerous dimensions,

including responsiveness/unresponsiveness (Freud, 1933), democratic/autocratic (Baldwin, 1948) and restrictive/permissive (Becker, 1964). However, perhaps the most widely used conceptualisation of parenting styles to date is Baumrind's (1968, 1971) framework. In Baumrind's (1968) seminal conceptualisation of parenting styles, the values and beliefs parents hold about their roles as parents help to define and shape the interactions that take place with their children. Baumrind conducted extensive observations and interviews with children and their parents, and identified three primary parental typologies that incorporated a diverse range of behaviours. These three typologies correspond to authoritative, authoritarian and permissive parenting. *Authoritative* parenting is characterised as being firm, involved, affectionate and respectful of the child. Authoritative parents have high maturity demands of their children, however, these demands are fostered by induction (explanation of their behaviours), and the encouragement of independence. In comparison, *authoritarian* parenting emphasises obedience with few explanations of rules or expectations. Authoritarian parents are strict and assert power when their children misbehave, and are neither warm nor responsive to their children. Finally, *permissive* parenting is characterised by excessively lax behavioural expectations and maturity demands, whereby parents' lack control and allow the child to behave independently.

Maccoby and Martin (1983) refined Baumrind's original conceptualisation by considering parenting styles as a reflection of two important orthogonal dimensions, namely *responsiveness* and *demandingness*. Responsiveness refers to parental attention to children's needs by encouraging individuality and self-regulation, whereas demandingness emphasises the enactment of disciplinary efforts when needed. According to Maccoby and Martin (1983), (a) authoritative parenting occurs when parents display high levels of both responsiveness and demandingness, (b) authoritarian parenting occurs when parents display high levels of demandingness and low levels of responsiveness, (c) *indulgent permissive* parenting occurs when high levels of responsiveness and low levels of demandingness are provided and (d) *neglectful permissive* parenting occurs when parents are neither responsive nor demanding.

These typologies of parenting styles have been applied extensively within the parenting literature to explain and predict a broad range of adolescent health behaviours (for a more comprehensive review of parenting styles and their impact on adolescent health behaviours, see Newman, Harrison, Dashiff, & Davies, 2008). However, only a very small number of studies have examined parenting styles in relation to adolescent *health-enhancing* behaviours such as physical activity and dietary behaviours. For example, only a single study by Schmitz et al. (2002) examined the influence of parenting styles in relation to adolescent physical activity behaviours. This study found that perceptions of authoritative parenting were associated with greater physical activity (in girls only). Similarly, only a small number of studies have examined adolescents' perceptions of parenting styles in relation to healthy eating and dietary practices (Kim et al., 2008; Kremers, Brug, de Vries, & Engels, 2003). Nonetheless, a consistent pattern across these studies was that adolescents' perceptions of authoritative parenting were found to be associated with the most adaptive responses.

Classifying health-related behaviours and practices as *health enhancing* and *health compromising* has been widely conceptualised in the adolescent health literature

(Jessor et al., 1998; Schwarzer & Luszczynska, 2008). The majority of studies on parenting styles have focused on adolescent health-compromising behaviours, such as drug use (Baumrind, 1991a), smoking onset (Castrucci & Gerlach, 2006), alcohol consumption (Simons-Morton, Haynie, Crump, Eitel, & Saylor, 2001) and sexual risk taking (Heubner & Howell, 2003). In general, this body of research indicates that adolescents whose parents are authoritative (demanding and responsive) are less likely to engage in substance use or sexual risk taking than either those with authoritarian (demanding but unresponsive) or indulgent permissive (non-demanding but responsive) parents. Supporting Maccoby and Martin's (1983) conceptualisation, adolescents with neglectful permissive parents are the most likely to engage in health-compromising behaviours (Igra & Irwin, 1996).

### *Health-related parenting practices*

Parenting practices have been conceptualised as context-specific acts of parenting (Darling & Steinberg, 1993) that are best understood as operating in fairly constrained domains, such as academic achievement, peer-group affiliation and in relation to health behaviours. Darling and Steinberg (1993) argued that the relevance of parenting practices depends on the specific outcome of interest. The parenting practices discussed in the following section include parental monitoring (e.g., tracking and structuring contexts), parent-adolescent communication (e.g., discussing values and expressing support) and parental involvement (e.g., engagement and modelling). These are the most extensively studied parenting practices pertaining to adolescent health behaviours.

#### *Parental monitoring*

Parental monitoring involves attention to and tracking of children's whereabouts, social activities and peer relations. In relation to health-enhancing behaviours, parental monitoring is an important contributor to *pre-adolescent* children's health. For example, greater monitoring of dietary intake and physical activity by parents is associated with improved health practices in younger children (Arredondo et al., 2006). In addition, obesity research in pre-school children has demonstrated that parents are able to mitigate their children's sedentary behaviours by monitoring their television use (Dennison, Erb, & Jenkins, 2002). In spite of the benefits of parental monitoring for young children, studies on the effectiveness of parental monitoring in relation to adolescent health-enhancing behaviours are limited. One study found that moderate levels of parental monitoring are associated with the lowest levels of unhealthy eating behaviours among overweight adolescents (Mellin, Neumark-Sztainer, Story, Ireland, & Resnick, 2002). This suggests a possible curvilinear effect with either too much or too little monitoring resulting in deleterious eating outcomes. In relation to active lifestyles, a recent longitudinal study by Ornelas, Perreira and Ayala (2007) found that parental monitoring did not predict physical activity behaviours among adolescents.

From the perspective of alleviating health-compromising behaviours, research has demonstrated that parental monitoring is important in reducing smoking (Simons-Morton, Chen, Abroms, & Haynie, 2004), alcohol use (Webb, Bray, Getz, & Adams, 2002), drug use (Stephenson, Quick, Atkinson, & Tschida, 2005) and sexual

risk taking (Li, Stanton, & Feigelman, 2000) among adolescents. In summary, this body of research suggests that parental monitoring is most often framed as a *protective* prevention strategy for adolescent's health-compromising behaviours, rather than a method to enhance health-enhancing behaviours. The fact that parental monitoring has not been found to predict adolescents' health-enhancing behaviours is perhaps unsurprising given that monitoring is considered detrimental to autonomy (Brey, 1999), and adolescence is a critical time for individuals to establish autonomy in order to regulate their nutrition and activity behaviours. Therefore, it seems reasonable to question whether adolescents can (or should) be expected to respond positively to parental monitoring with greater health-enhancing behaviours.

#### *Parent-adolescent communication*

Communication is generally defined as 'any messages or information passing between the members of a group of two or more' (Bienvu, 1969, p. 117), and includes transmitting facts, feelings, attitudes and beliefs between individuals. It is generally accepted that communication that is perceived as more positive (i.e., open, supportive and receptive) has a greater likelihood of fostering a positive parent-adolescent bond, and thus enhances parental influence over adolescents (Hawkins & Weis, 1985).

To date, no studies to our knowledge have examined the relationship between specific parental communication practices and adolescent physical activity or dietary behaviours. Nonetheless, a study by Boone and Lefkowitz (2007) provides a particularly interesting insight into parent-adolescent communication and health-enhancing behaviours. They examined the communication patterns of a broad range of health topics discussed by mothers and their adolescent children, and found that mothers discussed health issues in different ways depending on the type of health behaviour in question. For example, they spent far less time discussing nutrition and exercise topics than drugs and alcohol. Mothers in this study also discussed the negative consequences of poor nutrition and inactivity far less in their conversations with adolescents than the negative consequences of drug and alcohol use. Although no research to date has examined father-adolescent communication practices in relation to health-enhancing behaviours, these findings reflect a potential challenge for those concerned with public health; parents need to consider the salience of (illicit) health-compromising behaviours when interacting with their children, and *also* to foster awareness of the implications and importance associated with health-enhancing behaviours.

In a trend similar to that found in the parental monitoring literature, studies tend to focus on positive communication as a protective parenting practice designed to reduce the likelihood of adolescents engaging in health-compromising behaviours, such as sexual risk taking (Guilamo-Ramos et al., 2007), smoking onset (Beebe et al., 2008), alcohol consumption (Nash, McQueen, & Bray, 2005) and drug abuse (Caughlin & Malis, 2004). Despite evidence for the importance of positive communication practices as a protective parenting practice, several studies reported little or no association between parent-adolescent communication and adolescent health-compromising behaviours (Ennett, Bauman, Foshee, Pemberton, & Hicks, 2001). These contrasting findings are likely due to the differing operationalisations of

communication strategies adopted by parents. For example, the *frequency* of sexuality communication is often associated with less sexual risk taking (Somers & Canivez, 2003). However, in relation to smoking, the longitudinal effects of frequent communication have not been supported (Otten, Harakeh, Vermulst, Van den Eijnden, & Engels, 2007).

Beyond communication frequency, other studies have focused on the *quality* of parent-adolescent communication, such as the perceived *supportiveness* and *openness* of communication (Cable & Sacker, 2008; Kotchick, Dorsey, Miller, & Forehand, 1999). When parents are perceived as less supportive in their communication, and yet frequently engage in communication about sexual issues, adolescents tend to engage in more sexual risk taking than adolescents whose parents are perceived as supportive in their discussions of sexual health (Rodgers, 1999). This finding emphasises the fact that frequency of communication alone is not sufficient to advance adolescent development; instead, the communication must also be perceived as supportive by adolescents (Harakeh, Scholte, de Vries, & Engels, 2005; Otten et al., 2007).

#### *Parental involvement in health-related practices*

The parental practices reviewed thus far have focused mainly on preventing adolescents from engaging in health-compromising behaviours. We now focus primarily on those practices that reflect parental involvement in health-enhancing behaviours, in particular through parental modelling and social support.

One important way in which parents socialise their children and support their healthy psychological growth is by interacting with them, and being involved in their daily lives. Social learning theory provides one of the primary perspectives on socialisation processes (Bandura, 1986). With respect to the socialisation of health behaviours, social learning theory emphasises that behaviour is learned through direct personal experience, as well as the observation of trusted others (i.e., role modelling). A vast amount of research has sought to examine the extent to which parents' un/healthy behaviours transfer to, and become internalised by, their children.

One area of enquiry that exemplifies this approach concerns studies that examine parents' physical activity levels as a correlate of adolescent physical activity behaviours. In general, this body of evidence suggests that there is either a weak or no association between parents' and adolescents' physical activity levels (Anderssen, Wold, & Torsheim, 2006; Trost et al., 2003). It has been suggested that simply modelling physical activity is not sufficient, as it does not remove important barriers to physical activity, such as transportation or associated costs (Trost et al., 2003). In addition, it would seem unrealistic to expect parental modelling to exert a major effect on adolescent health behaviours given the competing influence of peer modelling during this important life stage (Beal, Ausiello, & Perrins, 2001). Parenthetically, the perceived importance that parents place on physical activity, together with elevated levels of parental support, is a better predictor of adolescent physical activity than parental physical activity alone (Trost et al., 2003), suggesting that inactive parents can still influence their children's activity habits, as long as they value the role of physical activity and support their children in leading active lifestyles. For example, adolescents who perceive their

parents to be supportive of physical activity are more likely to lead active lifestyles (Anderssen & Wold, 1992; Neumark-Sztainer, Story, Hannan, Tharp, & Rex, 2003). Similarly, parents' provision of a supportive eating environment at home enhances healthy eating behaviours (Satter, 1996).

While positive parental role modelling has limited effects on adolescents' physical activity behaviours, the modelling of negative behaviours by parents *does* translate into adolescents' engaging in health-compromising behaviours. Indeed, several studies have found that parental substance use is a significant predictor of adolescents' subsequent substance use (Ary, Tildesley, Hops, & Andrews, 1993; White, Johnson, & Buyske, 2000). Consistent with the tenets of social learning theory (Bandura, 1997), the degree of affiliation (or trust) that adolescents have with their parents moderates the effects of the modelled behaviour. Ironically, therefore, a stronger parent-child relationship can also enhance adolescents' involvement in health-compromising behaviours. As one example, adolescents tend to model their parents' substance (ab)use more closely when their level of parental attachment increases (Andrews, Hops, & Duncan, 1997). Indeed, this suggests that negative role modelling may be at least as strong a determinant of adolescents' health behaviours as positive role modelling, if not more so.

### ***Limitations of extant research on parenting styles and practices***

Notwithstanding the extant literature on parenting styles and practices, three broad limitations have restricted the development of research in this area. The first limitation derives from theoretical shortcomings in this area. For example, as an explanation of the inconsistent findings within the parenting *practices* literature, Crouter and Head (2002) suggest that researchers have largely focused on the predictive effects of discrete parenting practices, and have not considered the multitude of parenting practices together, or perhaps more importantly, the broader *quality* of the parent-child relationship. Although a variety of parenting practices have been identified in the parenting literature, there is little consensus on the most appropriate axes along which to understand, and thereafter to intervene with, these parenting behaviours. For example, although specific parenting *practices* (e.g., communicating rules about alcohol use) may be easier to identify and modify than broad parenting *styles* (Ennett, Bauman, Pemberton, et al., 2001), others have argued that the general family environment and overall quality of the relationship between the adolescent and the parent must be considered (Darling & Steinberg, 1993). In relation to research on parenting *styles*, and from a construct validity perspective, parents cannot be neatly or distinctly classified into a discrete set of parenting typologies (Baumrind, 1991b; Maccoby & Martin, 1983), making it difficult to know what feature of a given parenting style is responsible for the target outcomes of interest (Stewart & Bond, 2002). In addition, and perhaps most importantly, the underlying mechanisms that mediate the relationships between parenting styles and adolescent adaptive outcomes are still not fully understood (Darling & Steinberg, 1993).

The second limitation concerns issues of application whereby the transfer of theory to practice has been limited at best. Indeed, to be useful, theories must have practical benefits. In the adolescent health domain, the more successful interventions have generally focused on targeting discrete parenting practices, such as parental

monitoring (e.g., Stanton et al., 2004) or parental communication (e.g., Blake, Simkin, Ledsky, Perkins, & Calabrese, 2001). However, these studies have typically resulted in only short-term gains or negligible effects on actual health behaviours (e.g., Blake et al., 2001; St. Pierre, Mark, Kaltreider, & Aikin, 1997; Stanton et al., 2000; Toomey et al., 1996). One exception to this pattern was a parental monitoring intervention study by Stanton et al. (2004), in which positive intervention effects on health-risk perceptions, knowledge and behaviours (substance use and risky sexual behaviours) were demonstrated 2 years after the intervention. Finally, the predominant focus on the prevention of health-compromising behaviours in adolescents has meant that researchers have largely ignored the importance of parenting behaviours that inspire and empower adolescents to engage in higher levels of functioning, and in particular to pursue health-enhancing behaviours. This is demonstrated by a general lack of rigorous experimental and intervention studies that target parenting behaviours and strategies in relation to adolescent health-enhancing behaviours such as healthy eating and physical activity.

### **Transformational leadership**

From an alternative theoretical perspective, an extensive body of research within organisational psychology suggests that the essence of leadership is concerned with developing effective relationships with others, and inspiring people to achieve 'beyond expectations' (Bass, 1985). In this section, we provide an overview of the nature of transformational leadership theory, how it represents an opportunity to understand and enhance parenting behaviours and parent-adolescent interactions (Bass & Riggio, 2006), and overcome the three major problems identified in the parenting literature. Interestingly, Galbraith and Schvaneveldt (2005) have suggested that good leadership is not just needed within organisational settings; it is also needed within families.

Over the past two decades, transformational leadership theory (Bass & Riggio, 2006) has emerged as the most extensively studied framework for understanding leadership behaviours (cf. Barling, Christie, & Hopton, in press; Judge & Bono, 2000), and has been applied to contexts as varied as businesses (Barling, Weber, & Kelloway, 1996), sports (Charbonneau, Barling, & Kelloway, 2001), education (Koh, Steers, & Terborg, 1995), hospitals (Avolio, Zhu, Koh, & Bhatia, 2004) and the military (Kane & Tremble, 2000). The origins of transformational leadership theory can be traced to the political writing of Burns (1978); Bass (1985) subsequently differentiated between transformational and transactional leadership, and applied the theory to aid in understanding leadership within organisational contexts. Leadership behaviours can be best understood along continuum ranging from passive to active, and from least to most effective (Bass & Riggio, 2006). The theory includes laissez-faire, transactional and transformational behaviours. Laissez-faire leadership represents the most passive and least effective form of leadership, and is characterised by behaviours that reflect indifference, absence and a hesitancy to make decisions. Laissez-faire leadership has also been referred to as non-leadership (Bass, 1985).

Beyond laissez faire, or non-leadership, Bass and Riggio (2006) characterised *transactional leadership* as the use of corrective behaviours by leaders to eliminate problems and gain compliance among followers. As the term 'transactional' implies,

this form of leadership involves behaviours that are contingent on the successful/ unsuccessful execution of a set of standards or tasks. Specifically, transactional leadership comprises two dimensions that correspond to contingent reward and management-by-exception. *Contingent reward* involves goal setting, providing feedback and ensuring that behaviours have consequences, both positive and negative (Howell & Avolio, 1993). Managers' contingent reward behaviours are positively associated with ratings of leader effectiveness and employee satisfaction (Judge & Piccolo, 2004). *Management-by-exception* reflects the degree to which leaders intervene and take corrective action when standards are not met. *Active management-by-exception* occurs when leaders closely monitor followers' performance and look for errors, rather than focus on positive events (Barling et al., in press). They clarify the required standards of followers at the outset and actively search for deviations from what is required. In contrast, *passive management-by-exception* occurs when leaders intervene with criticism and blame only after mistakes are made, or standards are not met. At best, active management-by-exception is a weak but positive predictor of leader effectiveness and employee satisfaction, with passive management-by-exception and laissez-faire leadership negatively associated with those same outcomes (Judge & Piccolo, 2004).

Notwithstanding these findings, a central tenet of transformational leadership is the *augmentation hypothesis* (Bass, 1998), which suggests that the more active forms of transactional leadership (contingent reward and active management-by-exception) represent necessary but insufficient conditions for superior performance and responses among followers. To achieve optimal levels of functioning transformational leadership is also required. As Bass (1998, p. 5) noted, transformational leadership is not a substitute for transactional methods, rather that transactional leadership provides the basis for effective leadership and that 'transformational leadership styles build on the transactional base in contributing to the extra effort and performance of followers'.

So what is transformational leadership? Transformational leaders exert influence by empowering, inspiring and challenging others to achieve higher levels of functioning through the transmission of motives, values and beliefs (Bass & Riggio, 2006). Transformational leadership is conceptualised as comprising four separate dimensions namely idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. *Idealized influence* occurs when leaders behave in ways that engender the trust and respect of others, and are consistent and reliable. They behave as role models to followers, and lead through the demonstration of deeply held values and beliefs. Leaders who engage in *inspirational motivation* set high standards and raise followers' expectations regarding what they can achieve. They inspire and energise others to go beyond minimally accepted standards, by providing followers with a compelling vision of the future. *Intellectual stimulation* involves engaging the rationality of others, encouraging them to think for themselves and approach problems in innovative ways. Intellectually stimulating leaders empower followers to contribute new and alternative ideas. Finally, *individualized consideration* involves recognising individuals' developmental needs, displaying a genuine sense of care, compassion and empathy towards others.

An extensive body of empirical evidence has consistently demonstrated that transformational leadership is related to a variety of adaptive outcomes among followers. For example, studies have found that transformational leadership is related

to increases in followers' task performance (Kirkpatrick & Locke, 1996), perceptions of leader effectiveness (Judge & Piccolo, 2004) and trust in the leader (Burke, Sims, Lazzara, & Salas, 2007). There is also support for the positive influence of transformational leadership in relation to a variety of psychosocial outcomes among followers, such as greater empowerment (Dvir, Eden, Avolio, & Shamir, 2002), and the demonstration of citizenship behaviours (Piccolo & Colquitt, 2006). Of particular relevance to health and parenting behaviours, transformational leadership is linked both to the physical (Barling, Loughlin, & Kelloway, 2002) and psychological (Arnold, Turner, Barling, Kelloway, & McKee, 2007) well-being of employees. Transformational leadership also predicts a number of motivation-related cognitions and attitudes among followers including elevated levels of self-efficacy (Kark, Shamir, & Chen, 2003), self-determined motivation (Charbonneau et al., 2001) and commitment (Koh et al., 1995).

### **The application of transformational leadership theory to parenting behaviours**

Transformational leaders gain their influence by maximising the quality of their relationships with others (Wang, Law, Hackett, Wang, & Chen, 2005). They place great importance on developmental processes, such as empowering followers (Avolio, 1999), helping them to become autonomous in their actions and encouraging them to reach higher levels of functioning. Indeed, it is these very characteristics that discriminate transformational leadership from other forms of leadership (Burns, 1978), and makes transformational leadership theory especially relevant for understanding parenting behaviours. Adolescence is a period in one's life in which individuals are largely restricted in their autonomy, and are required to perform a range of behaviours that are *decided by others* (i.e., parents). This contrasts to adulthood, when people typically have (relatively) greater autonomy and are free(r) to decide their own courses of action. Parenthetically, this contextual insight into adolescence provides direct parallels with workplace settings whereby employees are often restricted in their autonomy by those in positions of leadership. Thus, in many regards the leader–follower dynamic that exists in workplace settings mirrors parent–child relationships within families.

Interestingly, transformational leadership has been described as being analogous to parent–child dynamics in many respects. In their recent review, Popper and Maysseless (2003) highlighted similarities that exist between aspects of effective parenting and the developmental aspects of transformational leadership, with a primary focus on fostering both employee (transformational leadership literature) and children's (parenting literature) motivation, empowerment and morality. In Table 1, we illustrate how the behaviours that constitute transformational leadership align with health-promoting parenting processes involving adolescents.

Although the application of transformational leadership theory to parenting is still in its infancy, three studies are worthy of note. In an early prospective observational study conducted within the context of youth sport, Zacharatos, Barling and Kelloway (2000) examined the processes that underlie how effective leadership behaviours might develop in adolescents. Specifically, Zacharatos et al. (2000) were interested in the extent to which transformational behaviours used by parents within the home might translate into adolescents demonstrating these same behaviours in the context of their peer interactions in sport. This study revealed that

Table 1. Parallels between transformational leadership theory and parenting.

Transformational leadership	Parenting
<p>Laissez faire Leaders avoid making decisions, hesitate to take action and provide neither positive nor negative consequences for performance or behaviour (Avolio, 1999)</p>	<p>A neglectful permissive parenting style, in which parents are neither warm nor responsive, provide neither discipline nor guidance, and impose few controls on their child's behaviour (Baumrind, 1991b), is associated with the highest levels of health-risk behaviours (Igra &amp; Irwin, 1996)</p>
<p>Management-by-exception Management-by-exception involves the degree to which leaders intervene and take corrective action. <i>Active</i> management-by-exception involves monitoring and correcting follower behaviour, and anticipating problems before they emerge and create serious difficulties (Judge &amp; Piccolo, 2004)</p>	<p>Like active management-by-exception, a considerable amount of research has examined parental monitoring during adolescence (e.g., Steinberg, Fletcher, &amp; Darling, 1994). Higher levels of monitoring are associated with reduced adolescent health-compromising behaviours, such as drug use and sexual risk taking (Dishion &amp; McMahan, 1998; Li, Stanton, &amp; Feigelman, 2000). However, high levels of parental monitoring are shown to have no effect on adolescent health-enhancing behaviours, such as physical activity and healthy eating (Mellin, Neumark-Sztainer, Story, Ireland, &amp; Resnick, 2002; Ornelas, Perreira, &amp; Ayala, 2007)</p>
<p>The <i>passive</i> form of management-by-exception involves intervention by the leader only after mistakes are made (Howell &amp; Avolio, 1993)</p>	<p>Like passive management-by-exception, parents' non-physical punishment following misbehaviour is associated with more negative consequences than other types of protective parenting behaviours, such as monitoring. For example, the use of repetitive and severe verbal reprimands by parents may result in the development of emotional and behavioural problems (Crittenden, Claussen, &amp; Sugarman, 1994)</p>
<p>Contingent reward A key feature of transactional leadership involves the setting of goals and the provision of feedback and rewards for those being led in exchange for their performance on a given task (Avolio, 1999)</p>	<p>The parenting literature has demonstrated the importance of rewards and praise in the positive socialisation of youth (Eisenberger &amp; Cameron, 1996). Rewarding youth for appropriate behaviours in the family is associated with the development of attachment to, and commitment within the family (Hawkins, Lishner, &amp; Catalano, 1985)</p>

Table 1 (Continued)

Transformational leadership	Parenting
<p><b>Idealized influence</b> Transformational leaders behave as role models (Bass, 1985) and embrace values-based principles (Bass &amp; Steidlmeier, 1999). They choose to do the right thing rather than what is expedient, thus gaining trust and respect of followers (Podsakoff, MacKenzie, &amp; Bommer, 1996)</p>	<p>Effective parents serve as positive role models (Perry et al., 1988), and generate a sense of trust (Kerr &amp; Stattin, 2000). Parents socialise their children by communicating the values they want their children to internalise (Spera, 2005). The socialisation of health-related behaviours occurs when parents' beliefs, attitudes and behaviours reinforce specific adolescents' health attitudes and behaviours (Tinsley, 2003)</p>
<p><b>Inspirational motivation</b> Transformational leaders provide meaning and challenge to followers' work, articulate a compelling vision of the future and display enthusiasm and optimism with regard to what followers can achieve (Bass &amp; Riggio, 2006)</p>	<p>Parents enhance self-efficacy in their children through providing an environment that sets high but realistic aspirations (Schunk &amp; Meece, 2006). Parental encouragement for physical activity is associated with youth physical-activity behaviours (Brustad, 1996), as parents intentionally transfer exercise beliefs and behaviours to their children through verbal encouragement (Lau, Quadrel, &amp; Hartman, 1990)</p>
<p><b>Intellectual stimulation</b> Transformational leaders encourage others to think independently and critically, and involve followers in the decision-making process (Bass, 1998)</p>	<p>Successful parenting encompasses behaviours that encourage children to think independently, and behaviours that are respectful of the children's ideas (Baumrind, 1971; Maccoby &amp; Martin, 1983); such behaviours predict the development of psychological autonomy (Steinberg, 2001)</p>
<p><b>Individualized consideration</b> Transformational leaders are sensitive to the needs of their employees, and support employee/follower growth and development (Bass, 1998)</p>	<p>Parenting styles that are sensitive to the child's needs and capabilities create optimal developmental outcomes (Belsky, 1984). Research demonstrates the positive effects of perceived parental social support on both physical activity (Vilhjalmsson, 1994) and dietary practices (Story, Neumark-Sztainer, &amp; French, 2002)</p>

ratings of adolescents' transformational leadership (as assessed by their coaches and peers) were indeed predicted by parents' displays of transformational behaviours. In another study, Galbraith and Schvaneveldt (2005) demonstrated that parents' transformational leadership behaviours predicted positive family outcomes such as

concordance/harmony. Inferences from this study should be tempered, however, because this exploratory investigation used recall with adult children, and only parents' perceptions of their own leadership behaviours. More recently, in a study of on-ice hockey aggression, Tucker, Turner, Barling and McEvoy (in press) showed a negative relationship between parents' transformational behaviours and teenagers' aggression; however, when the coach's transformational leadership was assessed simultaneously this relationship was found to be non-significant.

Although research integrating principles from parenting and transformational leadership is still at an early stage there are several features of transformational leadership theory that have the potential to contribute in ways that existing parenting approaches have fallen short. First, in spite of the vast amount of attention given to understanding the role of 'transactional' parenting approaches such as parental *monitoring*, research has typically focused on what parents *know* about their children and not what specific *behaviours* they use with their children (Kerr & Stattin, 2000). As such, findings from the transformational leadership and parenting areas may not be directly comparable, with this notion of parental monitoring possibly conveying parental care and concern (i.e., children are more willing to disclose information if they feel emotionally attached to parents; Kerr & Stattin, 2000). Our understanding of parenting behaviours and their effects might be enhanced if future conceptualisations of transformational parenting in general, and 'parenting-by-exception' in particular, ensure a closer parallel to the notion of management-by-exception, whereby researchers consider what parents 'do' rather than what they 'know'.

Beyond its general focus on behaviours, rather than knowledge (i.e., doing rather than knowing), an important theoretical contribution made by transformational leadership theory, and one that has particular relevance for understanding parenting processes, corresponds to the 'augmentation hypothesis' discussed earlier, whereby 'transactions are at the base of transformations' (Avolio, 1999, p. 37). Indeed, transactional parenting (e.g., monitoring, setting goals, providing feedback, and exchanging rewards for good behaviour) may serve as an effective *foundation* for promoting adolescent health, especially in terms of deterring health-compromising behaviours. However, to motivate adolescents beyond minimal expectations (e.g., avoiding health-compromising behaviours) and to engage in health-enhancing behaviours over time, *transformational* parenting behaviours become necessary. Moreover, as children spend greater time with their peers and mature into adolescence, and important health-enhancing behaviours increasingly become under voluntary control, parenting behaviours that serve to empower adolescents to choose to enact such behaviours become more critical. In line with the tenets of transformational leadership theory, improved adolescent functioning and adherence to health-related behaviours are achievable when parents *augment* transactional with transformational behaviours (Bass, 1998). Testing this proposition represents a fascinating direction for future research.

As previously noted, a major critique of the extant literature on parenting styles and practices concerns the transfer of theory to practice, as parenting interventions targeting multiple health behaviours and sustained behavioural change have, in general, resulted in negligible effects on actual health behaviours (e.g., Stanton et al., 2000). Perhaps more importantly, the general lack of experimental (and intervention) research on parenting to promote adolescent health-enhancing behaviours, coupled with the theoretical shortcomings of the extant parenting literatures, demonstrates

that an alternative paradigm of parenting is warranted. In support of the application of transformational leadership theory to parenting, a growing body of experimental research (in both laboratory-based and field-based settings) suggests that transformational behaviours can be taught and fostered, and that follower's attitudes and behaviours change positively in response to their leader's newly learned transformational skills (Barling et al., 1996; Kelloway & Barling, 2000; Kelloway, Barling, & Helleur, 2000; Shea & Howell, 1999). In summary, we suggest that *transformational parenting* represents an innovative framework from which to understand, develop and test interventions to drive salient health-promotion behaviours in adolescents.

### Mechanisms of transformational parenting

The preceding discussions demonstrate that transformational leadership behaviours are associated with desired employee outcomes, and suggest the potential for similar outcomes to emerge in relation to adolescents' health-related behaviours through the use of transformational parenting. However, the transformational leadership literature would suggest that even if parents enact the four behaviours, positive benefits do not simply happen. Thus, a critical question would be *how* any effects of transformational parenting might occur; and this discussion is guided by findings from the transformational leadership literature that point to the core role of numerous mechanisms that mediate any effects of transformational leadership on salient outcomes. In this section we discuss two broad categories of mediators that explain how transformational parenting may exert influence in relation to adolescent health behaviours. These correspond to (a) adolescents' perceptions of their parents (interpersonal mediators) and (b) adolescents' perceptions of themselves (intrapersonal mediators). The proposed process through which transformational parenting might affect adolescents' health behaviours is presented in Figure 1.

#### Interpersonal mediators

It is widely accepted that there is a positive relationship between transformational leadership and followers' perceptions of the leader (Barling et al., in press). In the

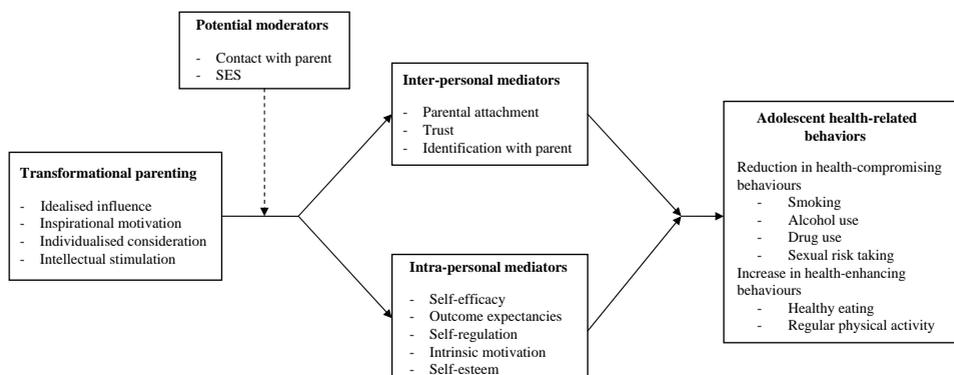


Figure 1. Proposed model linking transformational parenting and adolescent health-related behaviours.

workplace, employees feel a greater sense of commitment to leaders as a result of these positive perceptions, and in turn, this brings about a willingness to exert extra effort. In the parenting domain, a few studies have focused on adolescents' perceptions of their parents' behaviours, and on the quality of their relationship with their parents. These are highlighted as follows.

### *Attachment*

Attachment is defined as an enduring affective bond of substantial intensity (Armsden & Greenberg, 1987), and research has focused on the factors that promote adolescents' attachments with their parents. Adolescents who perceive their parents as authoritative are more likely to hold a positive view of their parents as defined by secure attachment (Karavasilis, Doyle, & Markiewicz, 2003). Similarly, because transformational leaders facilitate high-quality relationships with followers (Boyd & Taylor, 1998), we suggest that transformational parenting will strengthen attachment through increasing the overall quality of the parent-child relationship. This is important as high-quality leader-follower relationships are associated with greater task completion by followers (Liden & Graen, 1980). Because poor attachment to parents in the adolescent years is related to various risk behaviours such as increased levels of substance abuse (Rosenstein & Horowitz, 1996), we hypothesise that attachment will mediate the effects of transformational parenting on adolescent health-related behaviours.

### *Trust in the parent*

Transformational leadership is associated with enhanced trust in those leaders (Jung & Avolio, 2000). In the parenting domain, adolescents who perceive a strong mutual trust with their parents are less likely to engage in high-risk behaviours (Kerr, Stattin, & Trost, 1999). Research on *how* adolescents' trust in parents is developed has received little empirical attention (Rotenberg, 1995). In the organisational domain, however, followers who trust their leaders 'are motivated to do more than they are expected to do' (Yukl, 1989, p. 272). Therefore, we suggest that transformational parenting behaviours will motivate adolescents to pursue more healthy and adaptive behaviours (e.g., physical activity), and serve to deter adolescents from engaging in high-risk behaviours (e.g., substance abuse); and these pathways will be mediated by adolescents' trust in their parent.

### *Identification with a parent*

The idealized influence dimension of transformational leadership includes the ability to create a strong desire for identification on the part of followers (Bass & Riggio, 2006). Shamir (1995) also suggests that transformational leaders use behaviours such as personal support (individualized consideration) to contribute to followers' positive affect towards the leader, thus enhancing personal identification with the leader. Research also shows that follower perceptions of transformational leadership are related to greater identification with the leader (Kark et al., 2003). Identification with the leader mediates the relationship between leadership and a host of adaptive outcomes among followers (Barling et al., in press).

Within the parenting context, identification with a parent reflects the extent to which the child admires, emulates, and is similar in their beliefs and attitudes to those of the parent (Brook et al., 2001). Identification with parents is related to a reduced risk of health-compromising behaviours in adolescents (Brook et al., 2001). Identification with parents is facilitated by parental involvement, reflecting parenting strategies that display interest, and actively participate, in their child's life (Grolnick & Ryan, 1989). Thus, parenting behaviours that encompass idealized influence and individualized consideration will potentially enhance adolescents' identification with the parent, which in turn promotes health-enhancing behaviours and deters health-compromising behaviours.

### *Intrapersonal mediators*

The second type of mediator relates to internal psychological states of adolescents that are influenced by parents (i.e., self-perceptions). To understand the nature and role of these mediators, we draw upon core social-cognitive theories of behavioural change. Social-cognitive theories emphasise the inter-relationships that exist between cognitive, socio-environmental and behavioural factors (Bandura, 1997), and considerable empirical evidence has accumulated to explain how social cognitions can both promote health-enhancing actions as well as mitigate health-compromising behaviours. From a transformational leadership perspective, a growing body of evidence has also accumulated to suggest how transformational leadership can foster healthy social cognitions and adaptive health behaviours.

### *Self-efficacy beliefs*

Bandura (1986, p. 25) observed that 'what people think, believe, and feel affects how they behave'. Two social cognitions that are embedded within self-efficacy theory are self-efficacy beliefs and outcome expectations. Self-efficacy beliefs refer to individuals' confidence that they can enact particular behaviours, whereas outcome expectations involve judgements about whether those behaviours will result in specific consequences (Bandura, 1997). Both self-efficacy beliefs and outcome expectations influence self-initiated health behaviours (Bandura, 2004), and are viewed as being particularly salient during early adolescence as health-enhancing behaviours (e.g., leisure-time physical activity) become increasingly voluntary (Sallis, Prochaska, & Taylor, 2000).

The primary predictors of self-efficacy beliefs include previous mastery experiences, vicarious experiences (or modelling), verbal persuasion, and physiological and affective states (Bandura, 1997). 'Idealized influence' involves effective role modelling (i.e., vicarious experiences), and 'inspirational motivation' parallels Bandura's notion of verbal persuasion. According to Shamir, House and Arthur (1993), transformational leadership increases self-efficacy through expressing positive evaluations, communicating higher performance expectations and displaying optimism for followers' ability to meet such expectations, and by empowering rather than controlling their followers (Kanungo & Mendonca, 1998). Research from the organisational domain suggests that transformational leadership elevates followers' self-efficacy beliefs, and that these enhanced self-efficacy beliefs motivate employees (Bass, 1985; Kark et al., 2003; Kirkpatrick & Locke, 1996). In relation to parenting

behaviours, parental support (individualized consideration), encouragement and high achievement expectations (inspirational motivation), and effective modelling (cf. idealized influence) consistently predict self-efficacy in children and adolescents (Schunk & Miller, 2002).

Self-efficacy is associated with many health-enhancing behaviours such as nutrition and physical activity (Cusatis & Shannon, 1996; Sallis et al., 2000), and in preventing the development of a wide range of health-compromising behaviours, including alcohol use and smoking (Aas, Klepp, Laberg, & Aaro, 1995). Although research has yet to examine the predictive utility of transformational parenting in relation to adolescents' health choices and behaviours, the study of self-efficacy as a potential mediator of these choices/behaviours represents a particularly worthwhile direction for future research.

### *Outcome expectancies*

Outcome expectations are theorised to be a less powerful determinant of health behaviours than self-efficacy beliefs (Bandura, 1997, p. 24), and there is less research focusing specifically on its effects. Nonetheless, individuals can be motivated to change their behaviours on the basis of the expectations they have for a given outcome. One example of this corresponds to the Pygmalion effect (Rosenthal & Jacobson, 1968); in relation to transformational leadership theory, increased leader expectations regarding subordinates' achievements (inspirational motivation) are theorised to produce improvements in performance (Bass, 1985). From a health-compromising behaviour perspective, adolescents whose parents have high expectations for their behaviour, and hold them in high regard, are less likely to initiate substance use (Duncan, Duncan, Biglan, & Ary, 1998; Simons-Morton et al., 2001). In addition, adolescents who hold positive outcome expectations in relation to health-enhancing behaviours are more likely to be physically active (Winters, Petrosa, & Charlton, 2003).

### *Self-regulation*

Self-regulation is critical for changing health-related behaviours (Schwarzer, 2001), and may be especially critical during adolescence. Health self-regulation refers to the motivational and volitional process of abandoning health-compromising behaviours in favour of adopting and maintaining health-enhancing behaviours (Leventhal, Rabin, Leventhal, & Burns, 2001). Self-regulation involves the personal management of purposeful behaviour, and includes goal setting, self-monitoring and corrective self-reactions. A fundamental determinant of self-regulation corresponds to individuals' judgements about their abilities to effectively self-regulate, or what is also referred to as self-regulatory self-efficacy (Bandura, 1997). In a recent study by Shields et al. (2008), the family was a significant determinant of adolescents' self-regulatory efficacy beliefs, which in turn predicted adolescents' participation in physical activity. According to Bandura (1969), children develop self-regulatory abilities through the modelling of desired behaviours by various social agents (e.g., parents), and over time learn to develop self-regulatory functions such as standard setting, self-evaluation and self-reinforcement.

From a transformational leadership perspective, the provision of intellectual stimulation by leaders creates conditions whereby followers are more willing to learn, are encouraged to think for themselves, demonstrate greater self-awareness and indeed enhanced self-regulation (Avolio, 2003). Similarly, in the context of parenting, there is a wealth of research linking specific parenting behaviours with children and adolescents' self-regulation. For example, the provision of autonomy-supportive environments (the degree to which parents encourage participation in the decision making and active problem solving) increases children's self-regulation (Grolnick & Ryan, 1989). Adolescents who exhibit better self-regulation skills engage in higher levels of health-enhancing acts such as healthy eating (Contento, Williams, Michela, & Franklin, 2006) and increased physical activity (Anderson, Wojcik, Winett, & Williams, 2006). In contrast, low self-regulation predicts higher levels of substance abuse (Tarter, 2002) and greater sexual risk taking (Rafaelli & Crockett, 2003) among adolescents. In summary, the extent to which transformational parenting behaviours might influence adolescents' health-related self-regulatory capabilities and/or actions represents a particularly fruitful area for future research.

### *Self-determined motivation*

From a motivational perspective, Deci and Ryan (1985, 1991) suggest that when people report elevated states of *autonomy*, *competence* and *relatedness*, they are more likely to feel self-determined in the way in which they are motivated. According to Self-Determination Theory (SDT; Deci & Ryan, 1991) motivation can be intrinsic or extrinsic in nature. In addition, when people can no longer identify any reason for engaging in a given behaviour, they are said to be *amotivated*. There are several reasons for proposing that transformational parenting might be an important contextual predictor of self-determined motivation among adolescents. First, SDT suggests that when important social agents such as parents or teachers make use of controlling rather than autonomy-supportive behaviours, self-determined motivation is undermined, and can diminish (Ryan, Mims, & Koestner, 1983). Transformational leaders, however, encourage self-expression among others (Sheldon, Turban, Brown, Barrick, & Judge, 2003), which enables the development of autonomy-supportive relationships. Second, Charbonneau et al. (2001) purported that transformational leaders enhance knowledge, learning and understanding among others, and this intellectual stimulation enhances their feelings of competence. Finally, when leaders frame goals and expectations in ways that appeal to followers (inspirational motivation) and demonstrate concern for the well-being of others (individualized consideration), they are more likely to feel a sense of connection (or relatedness) with the leader, and thus report more adaptive (i.e., intrinsic) motives.

In one study, Charbonneau et al. (2001) demonstrated that when youth sport coaches were perceived to manifest transformational leadership, athletes reported higher levels of intrinsic motivation and performed better than their counterparts who were coached by non-transformational coaches. Although Charbonneau et al. did not examine autonomy, competence and relatedness in their study, one can suggest that these three psychological needs might mediate the relationships between transformational leadership behaviours and follower motivation.

Within the parenting literature, several studies have shown that autonomy-supportive parenting (relative to controlling parenting) is associated with children's intrinsic motivation (Grolnick, Deci, & Ryan, 1997; Joussemet, Landry, & Koestner, 2008). Furthermore, adolescents' self-determined motivation increases when parental feedback to adolescents is designed to support their sense of competence (Grolnick et al., 1997). Research has also shown that intrinsic motivation in youth is likely to flourish in contexts characterised by a sense of secure relatedness (Ryan & La Guardia, 2000), which predicts improved adolescent self-esteem and adaptive functioning in school settings (Ryan, Stiller, & Lynch, 1994). Last, research has consistently shown that self-determined (intrinsic) motivation is positively associated with a range of adolescent health behaviours, such as higher levels of physical activity (Lonsdale, Sabiston, Raedeke, Ha, & Sum, 2009), and a reduced intensity and frequency of smoking in adolescents (Williams, Cox, Kouides, & Deci, 1999).

In summary, the satisfaction of a person's psychological needs results in the elevation of more self-determined types of motivation, such as intrinsic motivation (Deci & Ryan, 1991; Sheldon et al., 2003). Self-determined behaviour is crucial for many health behaviours, such as increased physical activity, smoking cessation and diet improvement. Indeed, when people report more internalised (i.e., autonomous) reasons and greater perceived competence for health-behaviour change, maintaining those changes is more likely (Williams & Deci, 1996). A major direction for future research represents an examination of the extent to which transformational parenting helps adolescents internalise motives related to the enactment of healthy lifestyles.

### *Self-esteem*

Beyond self-efficacy, outcome expectations, self-regulation and self-determined motivation, the literatures on parenting and transformational leadership might help isolate other potential mediating mechanisms. For example, self-esteem has been examined in both the transformational leadership and parenting literatures. Transformational leaders enhance followers' self-esteem by articulating high expectations (Bass, 1985; Shamir et al., 1993; Yukl, 1989). Similarly, parents who display affection, empathy and closeness bring about enhanced self-esteem in youth (Baumrind, 1968). In turn, self-esteem is associated with adolescent health behaviours. For example, low self-esteem is found to predict adolescent health-compromising behaviours, such as smoking and early sexual activity (McGee & Williams, 2000). In contrast, high levels of self-esteem are associated with adolescent health-enhancing behaviours, such as physical activity (Ornelas et al., 2007). Furthermore, in the study by Ornelas et al. (2007) self-esteem was found to mediate the effects of parental influence in relation to adolescent physical activity behaviours. Other potential mediators might include specific attitudinal variables. For example, research has demonstrated that parents are able to influence children's health-related behaviours through the transmission of their own attitudes (De Bourdeaudhuij & Van Oost, 2000), and indeed future research is encouraged to determine exactly which attitudinal variables are fostered through the application of transformational parenting practices.

### **Moderating effects on transformational parenting**

A question of theoretical and practical importance relates to the boundary conditions of transformational parenting. Specifically, under what conditions might transformational parenting be more or less effective? Both the transformational leadership and parenting literatures have identified several factors that moderate the relationship between leadership/parent and organisational/child outcomes (Barling et al., in press; Lundahl, Risser, & Lovejoy, 2006). Perhaps the two most pertinent to an understanding of transformational parenting correspond to contact time that parents have with their adolescent children, and the socio-economic status (SES) of the family.

#### ***Adolescent contact with parents***

From the transformational leadership literature, there is evidence to suggest that physical distance to the leader moderates the effectiveness of transformational leadership (Howell, Neufeld, & Avolio, 2005). From a parenting perspective, increased demands on parental time through employment or changing family structures (e.g., divorce) result in some parents spending significant amounts of time away from their children (Sandberg & Hofferth, 2001). Limited contact would result in less opportunity for parental monitoring and developing close relationships through which children can be exposed to the full range of their transformational parenting behaviours. As one example, a wealth of research in the parenting domain has emphasised the importance of family meal times for parent–child interaction and socialisation within the family. Family meals provide an opportunity for modelling healthy eating patterns and social interactions among family members (Neumark-Sztainer, Wall, Story, & Fulkerson, 2004). In addition, the rituals developed by parents during meal times can foster an identity and connectedness that is particularly important during adolescent development (Collins, 1995). The moderating effect of contact with parents on the relationship between transformational parenting and adolescent health-related behaviours represents an interesting topic for investigation.

#### ***Socio-economic status (SES)***

Research supports the notion that SES moderates the effectiveness of parenting (Hoff, Laursen, & Tardif, 2002). For example, families undergoing economic hardship report more disruptions to child–parent relationships (Conger, Rueter, & Conger, 2000), with perceptions of financial stress negatively impacting parenting (Gutman & Eccles, 1999). Other ways in which SES can alter the effectiveness of parenting are through the characteristics of the physical environment (e.g., space for physical activity, availability of healthy foods), social norms (e.g., smoking levels in the community, eating habits) and the costs of health-enhancing behaviours. Therefore, despite parents' use of transformational behaviours with their teens (i.e., responding to individual needs and abilities), family resources, environmental and social factors may act as barriers which potentially limit the predictive utility of transformational parenting.

SES will also predict whether families live in poor and unsafe neighbourhoods, which present additional challenges for parents in such communities, as strategies that otherwise might foster adolescent autonomy (i.e., a reduction in monitoring, increased freedom for exploration and chances to learn from mistakes) might place adolescents at greater risk of exposure to health-compromising activities (McElhane & Allen, 2001). The level of risk in such environments may limit the effectiveness of transformational parenting, as the safety and well-being of adolescents might require greater use of transactional approaches (e.g., monitoring and limit setting). Thus, future research is clearly warranted to examine whether SES and transformational parenting interact to influence adolescent health-related behaviours.

Although not directly related to SES, research in the transformational leadership domain suggests that transformational behaviours actually have a stronger effect on follower performance when followers face difficulties and challenging goals, and thus need more guidance (Whittington, Goodwin, & Murray, 2004). This suggests that transformational parenting may actually be *more* important and effective when adolescents are faced with challenging goals and require more guidance from their parents. Future research is clearly warranted to examine how families' financial constraints and the physical environment contribute to influence adolescents' health-related behaviours.

### **Transformational parenting interventions**

We now turn our attention to the development of transformational parenting interventions. Although existing parenting programmes and interventions typically vary in philosophy and content (i.e., delivery methods and specific outcomes of interest), the ideology underpinning most parenting programmes is to help parents to understand the effects of their behaviour on their children, and to help them feel empowered and confident in their parenting roles (Gaze, 1997; Miller & Sambell, 2003). Consistent with the theory surrounding transformational leadership interventions (cf. Kelloway & Barling, 2000), a transformational parenting intervention would broadly focus on empowering parents (parenthetically, a major goal of transformational leadership interventions is to convince leaders that they can make a difference; Kelloway & Barling, 2000). This would raise parents' self-efficacy beliefs, which would lead to greater parental effort and persistence (Bandura, 1977). Interestingly, Moran, Ghate and van der Merwe (2004) purport that the focus (and reality) of many parenting interventions to date has been on identifying the weaknesses and deficits in parenting skills rather than the development of strengths, and yet it has been suggested that there is much to be gained by reconceptualising parenting research and practice in terms of 'accumulated opportunities' instead of 'accumulated risk' (Garbarino, Vorrasi, & Kostelny, 2002). Therefore, it seems plausible to suggest that transformational parenting interventions centred on empowering parents might deliver improved health-related outcomes for adolescents.

Research from the organisational psychology domain suggests that transformational behaviours can be developed through short-term interventions, including one-day workshops (Barling et al., 1996; Kelloway et al., 2000). To facilitate the delivery of effective transformational leadership interventions, Kelloway and Barling (2000) presented a four-element conceptual framework that emphasises the presentation of transformational principles (Element 1), demonstration of transformational

behaviours (Element 2), provision of opportunities to practice transformational behaviours (Element 3) and the provision of feedback on the performance of transformational behaviours (Element 4). In the context of delivering efficacious transformational parenting interventions, we envision the particular need to (a) make parents aware of how their behaviours potentially influence their children's health-related behaviours, (b) provide parents with domain-specific examples of transformational parenting, (c) give parents opportunities to practice transformational parenting strategies and (d) develop means to ensure that parents receive feedback on their (transformational) parenting strategies.

To support parents in their efforts to maintain the use of transformational behaviours over time, we would also encourage the use of self-regulation strategies designed to maximise parents' on-going use of transformational behaviours once the initial intervention (i.e., workshop) has ended. Self-regulation involves goal selection and construal, active goal pursuit, and goal attainment and maintenance processes (Maes & Karoly, 2005), and although studies have yet to implement self-regulatory components within transformational leadership interventions, we would envision that their implementation could support parents in their sustained use of transformational behaviours. In summary, the development of transformational parenting interventions designed to target health-enhancing behaviours among adolescents represents an exiting avenue for future research.

## Conclusions

Adolescence is a critical period during which positive health behaviours are developed, and parents play a decisive role in fostering this process. In this paper, we outlined how transformational leadership theory represents a conceptually sound and practically relevant framework for understanding the influence of parents on adolescents' health behaviours. Specifically, the application of transformational leadership theory to parenting serves to enable (a) a greater understanding of the effects of specific parenting behaviours in relation to salient health-compromising and health-enhancing behaviours among adolescents and (b) a potential opportunity to develop and apply conceptually sound interventions designed to target multiple health behaviours. We also discussed several potential mediating mechanisms through which transformational parenting might positively influence adolescent health-enhancing behaviours. Research addressing the core ideas offered above, such as whether and how transformational parenting influences the development and maintenance of adolescents' health-enhancing behaviours, and whether transformational parenting behaviours can be taught, is encouraged, and offers the potential to enhance both the theory and practice of transformational leadership and parenting.

## Note

1. Although the age range that we use to define adolescence is 10–18 (cf. APA, 2002), there currently exists no standard definition of 'adolescent'. The classification of this age group varies across agencies and organisations (cf. Grace & Patrick, 1994), and although it is most often captured as an age range, it can also be defined by factors such as physical, cognitive and social development.

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