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Abstract

Many children report feeling lonely sometimes or often. For most of those children, loneliness is a temporary experience, serving an adaptive function by motivating them to reconnect to others. Some children, however, feel lonely across long periods of time. Such prolonged loneliness has been found to be associated with academic difficulties and poorer psychological and physical health. The current chapter introduces the concept of loneliness in childhood, and its relation to intrapersonal associates (i.e., genetic factors, emotions, and cognitions) as well as interpersonal associates (i.e., relationships with family, peers, and teachers). Moreover, six avenues for future research are outlined, including current debates on the conceptualization and measurement of loneliness, and suggestions for the development of intervention and prevention programs.

Keywords: Loneliness, childhood, perceived social isolation

Loneliness

What is Loneliness and how Common is it?

Loneliness is defined as the unpleasant feeling that occurs when people perceive their network of social relationships to be deficient in some way, either because they have fewer relationships than they would like to have or they think the quality of their relationships is insufficient. Children aged 5 to 7 years old tend to describe a lonely child as someone who has no one to play with, equating loneliness and aloneness. However, from about 8 years of age, children are able to distinguish between loneliness and the objective state of being alone, and report that a child may be alone without feeling lonely or may feel lonely even when other children are around. It is also at that age that friendship quality, versus quantity, becomes increasingly important. About 15-20% of children feel lonely “sometimes” or “often”, with no gender differences in mean levels of loneliness, as evidenced in a recent large-scale meta-analysis (Maes, Qualter, Vanhalst, Van den Noortgate, & Goossens, 2017).

Currently, the most prominent theory of loneliness is the evolutionary theory of loneliness (J. T. Cacioppo et al., 2015). According to this theory, forming and maintaining social relationships is necessary for the survival of human genes, and loneliness serves as an innate biological warning system that signals to people that something is missing in their social relationships. Just as physical pain, hunger, and thirst are innate biological warning systems to motivate humans to minimize damage to the physical body, loneliness motivates people to reconnect with others and to minimize damage to the social body. Loneliness, thus, serves an adaptive function, and for most children it is indeed a transient experience, for example, between a change in circumstances (e.g., moving away) and one’s adaptation to the new circumstances (e.g., making new friends). However, other

children have more difficulties with addressing or solving experiences of loneliness in a satisfactory way and experience prolonged loneliness.

Addressing loneliness in childhood is important, not only because of the emotional pain it involves, but also because it detrimentally influences children's development across multiple domains (for reviews, see Galanaki & Vassilopoulou, 2007; Hawkley & Capitano, 2015). Loneliness has, for example, been negatively associated with academic adjustment, with lonely children showing lower reading ability, academic readiness, and grade point average, more school avoidance, and less classroom involvement and school liking. Furthermore, loneliness has been associated with children's mental well-being, contributing to low self-esteem, and depressive and anxiety symptoms. Regarding children's physical wellbeing, prospective effects of loneliness have been found on poor sleep quality, poorer general health, and more somatic symptoms.

Intrapersonal Associates of Loneliness

Research on intrapersonal associates of loneliness has mainly focused on genetic influences, emotions, and cognitions.

Genetic Influences. In line with the evolutionary theory of loneliness, loneliness is influenced by both genetic and environmental factors and current research is increasingly trying to unravel how both factors interact and influence loneliness (for a review, see Goossens et al., 2015). Several studies obtained heritability estimates, showing remarkably consistent estimates of just below 50%. Hence, the heritability of loneliness is substantial. Furthermore, research has focused on variants in single genes. In addition to main effects, evidence supports gene-environment interactions, showing that carriers of certain genotypes report more loneliness than non-carriers when they experience adverse social conditions (e.g., low social support from parents). However, effects are generally small and hard to replicate. More recent work, therefore,

has started to focus on polygenic scores, which are weighted sum scores based on multiple genes. A second line of research started to focus on an upregulated or downregulated expression of genes (for example by focusing on methylation). Most of the work on genetic factors in the development and maintenance of loneliness has been conducted with adults, with a few studies being conducted in adolescence; work examining loneliness and genetic factors among children is rare.

Emotions. Experiencing negative emotions, particularly sadness, is considered a core feature of loneliness. Many studies have documented that loneliness is related to more negative and less positive emotions. Recent work has extended those well-established trait-level associations by focusing on state-level emotional experiences. Such empirical study is an important addition to existing work because it (1) leads to better reporting of emotion because participants do not have to rate their mood states retrospectively, thus avoiding recall bias; and (2) acknowledges that emotions are dynamic in nature and should ideally be studied as such. Using this new approach, studies have found that lonely adolescents experience more negative emotions in negative social situations compared to their non-lonely peers (e.g., Van Roekel et al., 2014).

Cognitions. The importance of studying cognitive factors in relation to loneliness has increasingly been recognized over the last few decades. For example, the hypervigilance for social threat model (Cacioppo & Hawkley, 2009) and the re-affiliation mechanism model (Qualter et al., 2015) highlight the role of cognitive factors in the occurrence and maintenance of loneliness over time. Specifically, both theoretical models suggest a cognitive bias affecting attention, interpretation, and memory related to negative social situations. In adulthood, empirical work evidenced this cognitive bias in different domains (for reviews, see Cacioppo & Hawkley, 2009; Spithoven et al., 2017). A limited, but increasing, number of studies examined the association between loneliness and cognition in childhood, and generally confirmed that lonely children

display a negative cognitive bias in social situations (for a review, see Heinrich & Gullone, 2006). For example, lonely children have greater rejection expectations than non-lonely children and make more negative evaluations of themselves and others. Lonely children also tend to attribute social situations in a way that is self-defeating, attributing negative social events to internal, stable, and uncontrollable factors, and positive social events to unstable, external factors. Although more research is needed, cognitive factors seem to play an important role in the occurrence and maintenance of loneliness across the lifespan.

Interpersonal Associates of Loneliness

Research on interpersonal associates of loneliness has mainly focused on relationships with family, peers, and teachers.

Family. Several studies have shown the importance of family relationships in the development and maintenance of childhood loneliness (for a review, see Burgess, Ladd, Kochenderfer, Lambert, & Birch, 1999). For example, research found that children classified as having insecure-ambivalent attachment relationships during infancy reported more loneliness. In addition, children reported less loneliness when they perceived more parental warmth and responsiveness, and less parental behavioral control. With the increase in mothers working full-time in the workplace over the past few decades, there have been concerns of a negative impact on children's loneliness. While we might expect children to experience more loneliness when they are away from their families, research findings show that children in afterschool care actually report less loneliness (Demircan & Demir, 2014), with adult interactions in after-school care centers compensating for parental absence. Research on childhood loneliness and relationships with other family members, such as siblings, is currently rather scarce.

Peers. From an early age, difficulties in peer relationships are a source of loneliness. For example, peer victimization is associated with loneliness in children as young as 5 years of age. Across childhood, children become increasingly aware and concerned about their levels of acceptance among peers, with rejection by peers impacting individual well-being in general and loneliness in particular (for a review, see Prinstein & Giletta, 2016). Children's social cognitive processes also seem to be important here, as children who are unaware of their low peer acceptance may not report loneliness. Furthermore, children who attribute their social rejection to internal causes are likely to be unhappier with their social experiences and to report more loneliness. Moreover, the importance of close, dyadic friendships as a buffer against feeling lonely even when a child is unpopular among peers has been evidenced in empirical work. Specifically, both friendship quantity (i.e., the number of mutual friendships) and friendship quality (i.e., the various provisions that one's friendships afford, such as security and closeness) serve as buffers against loneliness in childhood.

Teachers. Evidence shows that children who are disruptive, aggressive, or antisocial are at greater risk of experiencing negative relationships with their teachers, but there is also evidence that children who have peer relationship problems are at risk of difficult teacher-child relationships. Research shows that lonely children experience more dependent teacher-child relationships (Burgess et al., 1999), where they utilize the teacher as a source of excessive support. That dependency may keep lonely children from exploring relationships with their peers in the classroom: it restricts their opportunities for social interaction with peers, the practicing of social skills, and the development of close friendships, increasing the likelihood of social isolation and feelings of loneliness. Future research is needed to examine whether this association between

teacher-child relationship problems and loneliness is a bidirectional association, as has been found regarding teacher-child relationships problems and child aggression.

Future Directions

Types of Loneliness. Researchers increasingly conceptualize loneliness as a multidimensional phenomenon, emphasizing the importance of distinguishing among different types of loneliness. This multidimensional view of loneliness originates from the social needs perspective (Weiss, 1973), which states that different types of social relationships fulfill different social needs. It could be that some of these needs are fulfilled, whereas others are not, and these different types of unfulfilled needs are thought to lead to different types of loneliness. Research distinguishing among different types of loneliness is increasing, showing that children, indeed, can experience one type but not another, and that different types are related to problems in different domains and to different forms of psychopathology. There is no clear consensus yet about which types of loneliness should be distinguished, but, recently, an overarching framework was proposed including three types of loneliness (S. Cacioppo, Grippo, London, Goossens, & Cacioppo, 2015). Intimate loneliness (or emotional loneliness) refers to the feeling of lacking a close, intimate attachment to another person, such as a parent or best friend. Relational loneliness (or social loneliness) refers to the feeling of lacking a network of social relationships, such as family or a group of friends. Collective loneliness refers to experienced discrepancies in one's valued social identities and connections with similar others. Those similar others are not necessarily known and constitute broader groups, such as one's school, neighborhood, or cultural group. Even though work on these different types of loneliness is increasing, refinements and extensions of the overarching framework are needed on both the conceptual and empirical level. Collective loneliness, for example, is a rather new concept, and additional research is needed to clarify the

conceptualization of this type of loneliness, including a clearer definition of the ‘similar others’. In addition, within each of the three broader loneliness types, there may be several subtypes. For example, intimate loneliness may be experience in the relationship with a parent, but also in the relationship with a best friend. It is not yet clear whether one high quality relationship (e.g., with a parent) might buffer against another relationship (e.g., with a best friend) of lower quality (cf. threshold model), or that relationships are additive resources and that well-being improves with each high quality relationship (cf. additive model).

Measurement. To measure loneliness in childhood, in the large majority of studies, the Children’s Loneliness Scale (CLS) has been used. Most commonly, the revised version has been used that focuses on the school context. Other standardized questionnaires that have appeared in the childhood loneliness literature include the Peer Network and Dyadic Loneliness Scale (PNDLS), the Loneliness and Aloneness Scale for Children and Adolescents (LACA), the Relational Provisions Loneliness Questionnaire (RPLQ), and the University of California Los Angeles (UCLA) Loneliness Scale. The CLS is mostly used as a unidimensional scale, and examines relational loneliness. In contrast, the UCLA Loneliness Scale, developed as a unidimensional scale and the most common measure in adult samples, examines both intimate and relational loneliness (Maes, Vanhalst, Van den Noortgate, & Goossens, 2017). The other three measures (i.e., the PNDLS, the LACA, and the RPLQ) have been developed as multidimensional scales, tapping into different types of loneliness.

Comparing findings across studies using different loneliness measures can be challenging, as each of these measures has its own format of items and answering categories. For example, it is yet unclear whether the maximum score of a particular scale reflects the same underlying feeling as the maximum score of another scale. Another striking difference between the measures used is

that some tap into frequencies with answering categories ranging from ‘never’ to ‘often’ (i.e., the UCLA Loneliness Scale, and the LACA), whereas others tap into the degree of agreement, with answering categories ranging from ‘not true at all’ to ‘always true’ (i.e., the CLS, the PNDLS, and the RPLQ). Another problem of the current loneliness measures is that they include items that measure the hypothesized causes of loneliness, resulting in an overestimation of the association between loneliness and those hypothesized causes. Examples of such items are “I have lots of friends in my class” (reverse scored item on the CLS) and “How often do you feel shy?” (item on the UCLA Loneliness Scale). Moreover, such items do not correspond well with the definition of loneliness, which focuses on the *perceived discrepancy* between one’s actual and desired social relationships: someone who does not have “lots of friends” would not feel lonely, as long as that person is satisfied with his or her social relationships.

Temporary Versus Prolonged Loneliness. Not all children follow the same pattern of loneliness across time. Several studies have investigated developmental trajectories of loneliness, and indicated that a small subgroup of youth has high loneliness across long periods of time (for a review, see Qualter et al., 2015). Importantly, research has consistently found that children who experience prolonged loneliness have poorer psychological and physical health compared to their peers who experience loneliness as a temporary, transient experience or those that do not feel lonely ever. Thus, although experiencing transient, temporary loneliness might be a normative experience for children (e.g., after a school transition or a friendship break-up), prolonged loneliness is not, and needs to be taken seriously. We suggest future work that examines the antecedents, consequences, and health outcomes of loneliness to also measure the duration of loneliness. We further advice clinicians to consider the duration of loneliness when working with child clients who report loneliness.

Cause Versus Consequence. It remains largely unknown whether the previously described associations between loneliness on the one hand and intra- and interpersonal factors on the other hand are unidirectional or bidirectional in nature. We suggest future research to empirically test and challenge theoretical directions of effects. For example, although loneliness is typically seen as a precursor of depressive symptoms, a number of studies in adolescence suggest that the association between loneliness and depressive symptoms is bidirectional in nature (e.g., Vanhalst et al., 2012). We suggest future work to conduct longterm longitudinal studies during childhood and into adolescence and adulthood that identify developmental origins as well as long-term consequences of childhood loneliness. Such empirical work would advance both theoretical knowledge and clinical practice focused on helping lonely children.

Childhood Loneliness Affecting Physical Health. Research examining the associations between loneliness and physical health in childhood is limited. The available research shows that loneliness affects physical health in children (Harris et al., 2013), with prolonged loneliness during childhood predicting self-reported poor physical health during adolescence and into adulthood (Hawkey & Capitano, 2015). Also, the mechanisms linking loneliness and poor physical health remain unclear. The most commonly advanced thesis is that prolonged loneliness causes psychological and physiological strains that dispose people toward emotional and health disorders. Within Cacioppo and Hawkey's (2009) model of loneliness, lonely individuals are perceived to experience more stress in everyday life because they are hyper-vigilant to social threat. It is that stress that causes chronic activation of physiological systems, leading to a range of somatic and psychological symptoms. Future work will want to establish which physiological mechanisms link loneliness to poor health and whether those mechanisms differ across the life span.

Loneliness Interventions. Because transient loneliness is viewed as adaptive, interventions should focus on (1) helping those children who have moved from transient to prolonged loneliness, and (2) ensuring that children who report transient loneliness do not move to prolonged loneliness. Thus, there may be a place for interventions designed for lonely children that focus on increasing social opportunities, and addressing the cognitive bias presented by lonely children, perhaps through interventions that use cognitive behavioral therapy (CBT) techniques and/or attention priming. In addition, we propose that studies examine the utility of individualized therapy and evaluate whether loneliness awareness training focused on reducing the stigma of loneliness is appropriate.

First, interventions focusing on social skills development and on increasing opportunities for social contact may be helpful. Although social skill deficits have some impact on loneliness, many lonely children are socially skilled and engage well with their peers. That means that loneliness interventions focusing on social skills development are unlikely to have wide-spread effects. Indeed, although their review of loneliness interventions was focused mainly on interventions for adults, Masi et al. (2010) showed that social skills based interventions were not very effective. However, we must keep in mind that while such an approach may not be suitable for all lonely children, there will be some lonely children – those who lack the social skills to reconnect when they feel lonely – who will benefit from such intervention. Future work should examine whether a particular loneliness intervention is effective for a subgroup of children, taking into account the causes of loneliness for those different subgroups.

While there is strong empirical evidence that there are no significant effects of interventions designed to increase social contact and social opportunities (Masi et al., 2010), those studies are limited to specific age groups and do not distinguish between lonely people who

experience transient versus prolonged loneliness (Qualter et al., 2015). It is possible that increasing opportunities for social engagement will be effective at reducing certain types of loneliness, and where social contact is usually limited, may stop children who experience transient loneliness being propelled into prolonged loneliness. Future studies should examine, using robust implementation and evaluation designs, whether interventions that aim to reduce social isolation and increase opportunities for reconnection are useful for lonely children.

Second, CBT and attention re-training may play an important role in reducing childhood loneliness. Lonely children tend to report lower self-worth compared to their nonlonely peers and show a negative cognitive bias in social situations, including greater rejection expectations, more negative views of themselves and others, and a self-defeating attribution style. Therefore, it seems of utmost importance to target cognitive biases in prevention and intervention programs aimed at alleviating loneliness (S. Cacioppo et al., 2015; Qualter et al., 2015). Indeed, in a previous meta-analysis (Masi et al., 2010), interventions focusing on addressing the maladaptive social cognitions and the resulting low self-esteem among adults have proved successful. Our proposal is that interventions based on CBT methods are likely to also be successful for children who suffer from prolonged loneliness, and for those children who have a certain cognitive bias that puts them at risk of moving from transient into prolonged loneliness.

Elsewhere (Qualter et al., 2015), we argued that interventions for lonely children could focus on offering them help to redirect their attention to social information that could be used to guide interpersonal behavior and to motivate them to reconnect. Given that interventions designed to accentuate the social gains and positive social features in the environment have been shown to be successful in increasing re-affiliation, such approaches specifically designed for lonely people are likely to prove effective.

Third, it is vital to reduce the stigmatization of loneliness and raise awareness that people across the lifespan may experience loneliness. Research examining how lonely people are viewed by others in society has shown that stigmatization of loneliness already appears in childhood. Children aged 7-9 years were found to stigmatize peers that are portrayed as having prolonged loneliness (Rotenberg, Bartley, & Toivonen, 1997). It is possible that stigmatization surrounding loneliness stops lonely children from asking for help and attempts to reduce the stigma around loneliness are recommended.

It is also important to note that because current government and charity campaigns to address loneliness have focused mainly on loneliness in old age, they may have done a disservice to young people because there are few discussions of youth loneliness. By focusing attention only on older people, we run the risk of creating public awareness of loneliness in that older age group and creating stigma around that experience during other ages – children may think that feeling lonely is something that would normally be confined to old age, leading to embarrassment that they are experiencing it. Raising awareness that loneliness is evident across the lifespan will be important for young people.

See Also

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Further Readings

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