



Children's Interactions with Family and Friends in Constrained Contexts: Considerations for Children's Subjective Well-Being

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Abstract

The primary aim of the study was to determine the relation between the frequency of children's interactions with family and friends and their subjective well-being amongst a sample of children residing in the Western Cape Province of South Africa. Within this process, the study further aimed to determine the differential relation of interactions with family and friends across two age groups (10- and 12-year-olds) and gender. The study included a sample of 2252 children between the ages of 10- to 12-years ($M_{age} = 11.01$, $SD = 1.00$). The instrument comprised a revised version of the Students' Life Satisfaction Scale and six items representing the frequency of interactions with family and friends. We used confirmatory factor analysis and structural equation modelling to analyse the data, with multi-group structural equation modelling to analyse the data across the two age groups and gender. We found a significant relation between children's frequency of interactions with family and friends and their subjective well-being. While each of the latent constructs made a significant contribution, 'frequency of interactions with family' made the highest contribution to subjective well-being for the overall sample. Multi-group structural equation modelling demonstrated evidence of scalar invariance across age (10- and 12-year-olds) and gender, which endorses comparisons across groups by correlations, regression coefficients and mean scores. The latent variable 'frequency of interactions with family' presented with a stronger contribution for both age groups, as well as for both boys and girls. The study highlights the importance of social relationships on children's lives and well-being.

Keywords Children's subjective well-being · Social relationships and interactions · Subjective well-being · South Africa · Confirmatory factor analysis · Structural equation modelling

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Background

Children's subjective well-being (SWB) is a multifaceted concept, which refers to the cognitive and affective perceptions, and evaluations that children have about their lives in general, and specific aspects of their lives. The cognitive aspect refers to children's perceptions of life satisfaction, while the affect component refers to perceptions of positive and negative affect (Rees et al., 2020). Traditionally, these components are conceptualised on a 'tripartite' hierarchical structure that are conceptually aligned, moderately correlated, with each component making a unique contribution to the higher-order construct of SWB (Diener, 2009). Recently, Savahl et al. (2021) confirmed the viability of a quadripartite hierarchical structural configuration, consisting of four first-order factors (context-free, domain-specific, positive affect, and negative affect). The interest in research on children's SWB has developed considerably over the past two decades driven to a large extent by theoretical and epistemological advances in childhood studies, a global focus on child rights legislation and the shift towards positive social science. This interest has provided the impetus for a range of empirical studies exploring macro and micro-level associations and correlates of children's SWB. Within this rapidly expanding body of empirical evidence, children's social relationships have increasingly demonstrated significant relations with their SWB (see Goswami, 2012; Gray et al., 2013; Haanpää & af Ursin, 2018; Haanpää et al., 2019; Holder & Coleman, 2009; Lau & Bradshaw, 2018; Lee & Yoo, 2015; McAuley et al., 2012; Sarriera et al., 2018; Savahl et al., 2020). Within the extant literature on positive psychology, social relationships are strongly associated with positive well-being (Holder & Coleman, 2016). In particular, studies have identified the nature and quality of relationships with family and friends as a significant factor contributing to children's SWB (Bradshaw et al., 2013; Chanfreau et al., 2013; Goswami, 2012; Holder & Coleman, 2009; Savahl et al., 2020).

Families are an integral part of society and provide the first context within which children learn to live life, serving as their primary source of social capital (see Sarriera et al., 2018). Within this context, children learn basic social skills which are further reflected in their interactions with society. Issues around family functioning, cultural norms, religion, and the socio-economic status shape the parental practices. While a close parent and child relationship holds great potential for improving children's emotional development and has a positive impact on their life satisfaction (McAuley & Rose, 2014; Savahl et al., 2020), constrained contexts, such as those created by poverty and deprivation have shown to have negative affect on children's relationships with parents (Lau & Bradshaw, 2018). Positive relationships with friends are critical in children's lives and well-being (Holder & Coleman, 2016). Friendships harness feelings of school belonging, trust, and companionship and function as a buffer against external negative stressors such as bullying, school adjustment, or family problems, which may result in poor mental health (Hamm & Faircloth, 2005; McDonald et al., 2010). Positive friendships have also shown to be related to greater self-esteem, self-worth, and prosocial behaviors, and lower levels of loneliness and depression (Burk &

Laursen, 2005; Hartup & Stevens, 1999). Holder and Coleman (2016) indicate that the contribution of relationships with friends to children's happiness may vary across age between children, adolescents, and adults.

Children's Relationships with Family and Friends, and their SWB

Social relationships are an elementary human need (Haanpää et al., 2019). Scholars argue that social relations can enhance happiness as a shared interaction, and can result in enjoyment (DiTommaso and Spinner 1993; Holder & Coleman, 2009). While social relational theories about children have primarily underscored negative aspects, empirical research over the last two decades have focused on the positive components (Holder & Coleman, 2009). The existing literature demonstrates a clear association between children's relationships with family and friends, and their SWB. In one of the earlier empirical studies on social relationships and children's well-being, Holder and Coleman (2009) explored the contribution of social relationships to children's happiness and well-being in a sample of 432 children between the ages of 9- to 12-years. They found that children's social interactions with family and friends significantly contributed to the variation in children's happiness. In a larger national study, McAuley et al. (2012) explored children's perspectives of their relationships with family and friends and engagement in daily activities in a sample of 8568 nine-year-old children in Ireland. The study found that children's interactions with their family and friends had a positive influence on their well-being, whereas being bullied (negative peer interactions) was related to feelings of fear, anger, and feeling embarrassed (McAuley et al., 2012).

Lau and Bradshaw (2018) in their analysis of the Poverty, Social Disadvantages and Child Well-Being Survey in Hong Kong (N=793, 10- to 17-years), similarly found an association between positive (positive relationships with family and teachers and perceived social support) and negative peer interactions (being exposed to bullying), aspects of children's relationships, and their life satisfaction. Further, they found that boys had fewer interactions with both their parents and friends in comparison to girls. Girls reported that they would receive more support from friends and family in comparison to boys. Additionally, they found that younger children spend more time with their family when compared to older children (Lau & Bradshaw, 2018). This was also found in a study by Thoilliez (2011). Similar results were also evident in longitudinal studies. For example, Chanfreau et al. (2013) in their longitudinal analysis of the Understanding Society survey in the UK with 40 000 households, found a significant association between children social relationships with their family and friends, and their well-being.

Children's SWB is also related to family structure (Haanpää et al., 2019). Empirical research demonstrates that children living in a dual-parent (biological parents) household have higher life satisfaction, than those living with one parent or step-parent/s (Bjarnason et al., 2012; Bradshaw et al., 2011; Dinisman et al., 2017; Goswami, 2014; Haanpää et al., 2019; Mínguez 2020; Rees, 2017). From these studies, one can conclude that while family structure has a significant impact on children's subjective well-being, the exact nature and size of this impact is context-dependent

(Rees, 2017). It is important to note that some research on family structure only demonstrates a weak relation to children's life satisfaction (Huebner, 1991a); with some authors (e.g. Haanpää et al., 2019) suggesting that the quality of social relationships is more significant for children's well-being than the structure of the family.

Some studies found that relationships with family made a stronger contribution to children's well-being than friends and other aspects of children's lives. Goswami (2012) explored the association between positive and negative relational aspects and SWB among 4673 children and youth in England. He found that negative relational aspects (e.g. being treated unfairly by adults and experiencing bullying victimisation) were associated with lower levels of children's SWB, whereas positive relational aspects were associated with higher levels of their SWB. He further found that while relationships with friends were found to make a significant contribution to children's well-being, family relationships made the highest contribution. Similarly, a study conducted by Haanpää et al. (2019) with a sample of 1793 Finnish children, found that poverty and children's social relationships contributed to changes in their levels of life satisfaction, with the mother-child relationship making the highest contribution (Haanpää et al., 2019). Further, a study conducted by Gray et al. (2013) examined the extent to which family level factors contributed towards children's happiness. The study included a sample of 905 children between the ages of 15- to 18-years. They found that family factors made a higher contribution to children's happiness than non-family factors. Children who indicated a higher level of love and connectedness with their family showed higher levels of happiness compared to those who indicated not spending enough time with their family. In a study conducted in South Africa with a sample of 2252 primary school children, Savahl et al. (2020) explored the contribution of children's time-use, daily activities and social interactions to their SWB across age (10 and 12-year olds), gender (girls and boys), geographical location (urban/rural). They found a significant relation between children's social interactions, time-use and daily activities and their SWB. Importantly, they found that children's social interactions with family and friends made a stronger contribution to children's SWB than their time-use and daily activities; and that children's relationships with their family made a higher contribution to the variation in children's SWB than relationships with friends. They also employed multigroup analysis to determine measurement invariance across age, gender, and geographical location (urban/rural). They found that metric invariance was tenable but not scalar invariance; this indicates that groups could be compared across age and gender using correlations and regressions but not mean scores.

Studies using cross-country samples presented with similar overall findings. Lee and Yoo's (2015) cross-country analysis of 12 077 children in 14 countries found that while school (9%) and community (7%) made a significant contribution to the variance in children's SWB, spending time with the family made the greatest contribution (40%) to their SWB (Lee & Yoo, 2015). In another cross-country study, Sarriera et al (2018) explored the association between SWB and personal relationships among a sample of 6747 Spanish and Brazilian children aged 11 – 14 years. The study found that family, school, and friends predicted children's SWB, with family being the strongest predictor for both countries (Sarriera et al., 2018).

Further consideration also needs to be given to the influence of the micro-factors of age and gender on the relation between children's social relationships and their SWB. Findings from empirical studies have consistently demonstrated that scores on overall and domain-based measures of SWB generally decrease with age (see Casas & González-Carrasco, 2019 for a review); with a more pronounced decrease found in girls (González-Carrasco et al., 2017). Across gender, however, findings have been less consistent. Generally, girls score lower than boys on overall SWB; however, this trend was not found across various domains of well-being and aspects of life – this differential in scores across gender appears to be related to specific contexts. (Rees, 2017; Rees et al., 2020). As it relates to children's social relationships and their SWB, there are less empirical initiatives that have explored this relation across age and gender.

Rationale

Taken together, research has confirmed that children's interaction with their family and friends are key contributors to their SWB across a range of diverse contexts. However, an understanding of the mechanisms through which these relationships function to influence children's SWB is not forthcoming. Less information is also available regarding the variable influence of interactions and relationships with either family and friends, or how this affects children of different ages. Further to that, most of the available empirical studies have been conducted in high-income contexts, with a notable lack of research conducted amongst participants in low- and middle-income contexts. It is through a consideration of these gaps in the literature, that the current study finds relevance.

Aim of the Study

The overarching aim of this study was to determine the extent to which the frequency of children's interactions with their family and friends contribute to children's SWB. The study further aimed to determine the variable influence of children's interactions with family and friends on their SWB; and to determine whether these relations vary across two age groups (10- and 12-years) and gender.

Method

Data Source and Sampling

We used data sourced from the 2nd wave of the Children's Worlds survey, an international study conducted by researchers aligned to the International Society for Child Indicators. The survey gathers data on SWB from children in over 40 countries. For the current study, the sample included 2252 children randomly selected from 29 primary schools in two age groups (10- and 12-years-old; $M_{age} = 11.01$, $SD = 1.00$), located in both urban and rural contexts in the Western Cape Province of

South Africa. More specifically, we used stratified proportionate random sampling to select learners from eight education management district councils of the Western Cape, comprising four rural and four urban districts. A central co-ordinating committee with expertise in sampling and conducting comparative international surveys oversaw the sampling protocol, instrument development and data analytic plan of each participating country. The management of multinational collaborative studies through central co-ordinating committees leads to improved quality and integrity of the data (Casas & Rees, 2015).

Instrumentation

Family and Friends

We asked children six questions relating to their interactions with family and friends. These questions included the frequency they talked to, had fun with, and learned with either their family or friends. Response options were on a verbal format assessing frequency: “not at all”; “once or twice”; “most days”; and “every day”.

Students’ Life Satisfaction Scale

To measure children’s SWB, we used a revised version of the Students’ Life Satisfaction Scale (SLSS, Huebner, 1991b). The revised version consisted of the following six items: “My life is going well”, “My life is just right”, “I have a good life”, “I have what I want in life”; “My life is better than most”, with the final item, “The things in my life are excellent” included from the Satisfaction with Life Scale (Diener et al., 1985). The scale used an eleven-point agreement response format with end-labelled unipolar points of “not at all agree” (0) to “totally agree” (10). The scale was previously validated in South Africa, and presented with acceptable psychometric properties (see Savahl et al., 2017).

Ethics

The Institutional Review Board of the University of the Western Cape granted ethics clearance. We provided participants with information regarding informed consent, anonymity, withdrawal, and the future use of the data. The study followed an active consent protocol—signed consent from the participants and the parents or legal guardians of children was a pre-requisite for participation. We collected the data by means of a researcher-administered protocol using a paper-based questionnaire.

Data Analytic Plan

The aforementioned central co-ordinating committee conducted the cleaning and deputation of the dataset. This included the identification of response sets, excluding cases with more than 25% missing data and attending to clustering due to survey design effects. A missing data analysis showed less than 5% missing data, with the

items found to be 'missing completely at random'. We applied the Full Information Maximum Likelihood technique as a resolution for the missing data. Our analysis used the Maximum Likelihood estimation method, with the bootstrap method (500 resamples; 95% confidence intervals) employed to address non-normality of data. The bootstrap procedure allows for more accurate parameter estimates and the efficient handling of standard errors in the context of non-normal data (Blunch, 2008; Enders, 2010).

The data analytic plan followed a four-step sequential process, which included the generation of descriptive statistics in Stata (version 14, StataCorp LLC, College Station, TX) and a range of data modelling techniques using maximum likelihood estimation in AMOS (version 27, IBM Corp, NY). In the first step, we generated descriptive statistics, specifically presenting the means and standard deviations, skewness and kurtosis, and the correlation matrix. In the second step, we conducted confirmatory factor analysis (CFA) on the latent measures to ascertain the best fit structure. Comparative Fit Index (CFI), Root Mean Squared Error of Approximation (RMSEA), and Standardised Root Mean Residual (SRMR) were used as fit indices (Chen, 2007). We accepted threshold values exceeding 0.950 as a good fit for CFI and values less than 0.05 as an appropriate fit for the RMSEA and SRMR (Casas, 2017). To improve the model fit, we firstly considered items with disproportionately low factor loadings (<0.2). Thereafter, we endorsed the deletion of these items if the fit indices improved by more than 0.1. Finally, we inspected the modification indices where we considered the addition of error covariance constraints on items with substantial content overlap (Savahl et al., 2020). In the third step, we conducted SEM to determine the strength of relations between the latent variables. We used the Squared Multiple Correlations (SMC) statistic to ascertain the contribution of the latent variables on SWB. In the final step, we used multi-group SEM (MGSEM) to establish the tenability of measurement invariance across age and gender.

Measurement invariance is a statistical procedure that assesses the extent to which a latent construct varies across multiple groups; with configural, metric, and scalar invariance regarded as the most common methods (Xu & Tracey, 2017). The attainment of measurement invariance suggests that group comparisons are meaningful and unambiguous. We assessed configural metric and scalar invariance through three sequential steps wherein increasing degrees of constraint were applied to the baseline model (Savahl et al., 2017). First, we tested configural invariance by freely estimating the parameters. Second, we tested metric invariance through the application of constraints on the factor loadings. Third, we tested scalar invariance through the application of constraints on the factor loadings and intercepts. We retained each constrained model if the fit did not decrease by more than 0.01 on the CFI (Cheung & Rensvold, 2002) and increase by 0.015 on the RMSEA and SRMR (Chen, 2007).

Results

Table 1 presents the correlation matrix between the variables included in the model. The correlation coefficients ranged from 0.0891 (*LifeBetterMost* and *FreqLearnFriends*) to 0.6413 (*LifeJustRight* and *LifeGoingWell*). Interestingly, the correlation

Table 1 Items correlation matrix

	FreqTalk-Fam	FreqFun-Fam	FreqLearn-Fam	FreqTalk-Friends	FreqFun-Friends	FreqLearn-Friends	LifeGoing-Well	LifeJust-Right	Have-GoodLife	Have-WhatWant	LifeBetter-Most	ThingsLifeExcellent
FreqTalk-Fam	1.0000											
FreqFun-Fam	0.3912	1.0000										
FreqLearn-Fam	0.3278	0.4086	1.0000									
FreqTalk-Friends	0.2046	0.2079	0.1582	1.0000								
FreqFun-Friends	0.1716	0.2522	0.1824	0.5519	1.0000							
FreqLearn-Friends	0.1081	0.1938	0.2312	0.2236	0.2707	1.0000						
LifeGoing-Well	0.2027	0.2705	0.2689	0.2009	0.2002	0.1127	1.0000					
LifeJust-Right	0.2494	0.2619	0.2515	0.2136	0.1876	0.1118	0.6413	1.0000				
HaveGood-Life	0.2394	0.2550	0.2360	0.1427	0.1824	0.1333	0.5914	0.5724	1.0000			
HaveWhat-Want	0.2244	0.2438	0.2328	0.1149	0.1463	0.0983	0.4362	0.4011	0.4638	1.0000		
LifeBetter-Most	0.1710	0.2046	0.1930	0.1115	0.1231	0.0891	0.3733	0.3442	0.3613	0.4498	1.0000	
ThingsLifeExcellent	0.2498	0.2985	0.2710	0.1621	0.2150	0.1320	0.5801	0.5390	0.5445	0.4706	0.4423	1.0000

All correlation coefficients significant at $p < .001$

coefficients between most of the items across frequency of talking, having fun, and learning with family and friends demonstrated weak correlations below 0.30. The only exception was the moderate correlation coefficient of 0.5519 between *FreqFunFriends* and *FreqTalkFriends*. The lowest correlation coefficients were for the item *FreqLearnFriends* and two SLSS items: *LifeBetterMost*: $r=0.0891$ and *HaveWhatWant*: 0.0983.

Table 2 presents the descriptive statistics (item mean scores, standard deviations, skewness and kurtosis) for the social interactions items and the SLSS. Skewness for the social interactions items ranged from -0.845 (*FreqFunFam*) to -1.479 (*FreqTalkFriends*), and kurtosis ranged from 1.429 (*FreqLearnFriends*) to 4.201 (*FreqTalkFriends*). For the SLSS, skewness ranged from -0.890 (*LifeBetterMost*) to -2.139 (*LifeGoingWell*), with kurtosis from 2.487 (*LifeBetterMost*) to 7.128 (*LifeGoingWell*). The skewness and kurtosis of the items fell beyond acceptable thresholds (Finney & DiStefano, 2006). We attended to these deviations using the bootstrap method (500 samples) in AMOS 27 (Blunch, 2008).

The overall mean scores for the social interactions items ranged from $M=1.361$ ($SD=1.210$; *FreqLearnFriends*) to $M=2.428$ ($SD=0.835$; *FreqTalkFam*). For the SLSS, the overall item mean scores ranged from $M=6.982$ ($SD=3.444$; *LifeBetterMost*) to $M=8.702$ ($SD=2.356$; *LifeGoingWell*).

Across age, for the social interactions items, the mean scores for the 10-year-olds ranged from $M=1.534$ ($SD=1.254$; *FreqLearnFriends*) to $M=2.428$ ($SD=0.850$; *FreqTalkFam*). For the 12-year-olds, the mean scores ranged from $M=1.198$ ($SD=1.144$; *FreqLearnFriends*) to $M=2.452$ ($SD=0.858$; *FreqTalkFriends*). For the SLSS, mean scores for the 10-year-olds ranged from $M=7.240$ ($SD=3.443$; *LifeBetterMost*) to $M=8.980$ ($SD=2.163$; *LifeGoingWell*). For the 12-year olds, mean scores ranged from $M=6.741$ ($SD=3.427$; *LifeBetterMost*) to $M=8.441$ ($SD=2.497$; *LifeGoingWell*).

Across gender, for the social interaction items, the mean scores for boys ranged from $M=1.461$ ($SD=1.207$; *FreqLearnFriends*) to $M=2.446$ ($SD=0.847$; *FreqFunFriends*). For girls, the mean scores ranged from $M=1.272$ ($SD=1.206$; *FreqLearnFriends*) to $M=2.466$ ($SD=0.798$; *FreqTalkFam*). For the SLSS, mean scores for the boys ranged from $M=7.202$ ($SD=3.375$; *LifeBetterMost*) to $M=8.780$ ($SD=2.396$; *LifeGoingWell*). For girls, the mean scores ranged from $M=6.789$ ($SD=3.491$; *LifeBetterMost*) to $M=8.633$. ($SD=2.320$; *LifeGoingWell*).

Confirmatory Factor Analysis

We conducted CFA to test the fit indices of the separate latent constructs to ascertain appropriate fit. For the latent construct *frequency of interactions* with family and friends we initially tested a two-factor model, which presented with an inappropriate fit (see Model 1 in Table 3). However, after the exclusion of item *frequency friends study together*, owing to a low factor loading, the model fit improved substantially (see Model 2 in Table 3). Factor loadings ranged between 0.56 and 0.78. While the initial SLSS model did not present with an appropriate fit (see Model 3 in Table 3), it improved with the exclusion of the item *My life is better than most*. The factor

Table 2 Item mean scores

Item	Overall		Skewness	Kurtosis	Age		12		Gender			
	Mean	SD			10		Mean	SD	Boy		Girl	
					Mean	SD			Mean	SD	Mean	SD
FreqTalkFam	2.428	.835	-1.365	3.977	2.428	.850	2.429	.822	2.385	.875	2.466	.798
FreqFunFam	2.190	.866	-.845	2.869	2.304	.841	2.082	.874	2.172	.881	2.205	.852
FreqLearnFam	2.128	.987	-.908	2.691	2.239	.936	2.024	1.021	2.128	1.001	2.129	.974
FreqTalkFriends	2.431	.882	-1.479	4.201	2.410	.905	2.452	.858	2.433	.876	2.431	.886
FreqFunFriends	2.368	.889	-1.373	3.966	2.348	.892	2.386	.886	2.446	.847	2.299	.919
FreqLearnFriends	1.361	1.210	.1052	1.429	1.534	1.254	1.198	1.144	1.461	1.207	1.272	1.206
LifeGoingWell	8.702	2.356	-2.139	7.128	8.980	2.163	8.441	2.497	8.780	2.396	8.633	2.320
LifeJustRight	8.544	2.484	-1.947	6.187	8.749	2.410	8.351	2.536	8.664	2.438	8.438	2.518
HaveGoodLife	8.538	2.609	-1.981	6.096	8.735	2.584	8.353	2.618	8.651	2.540	8.439	2.662
HaveWhatWant	7.610	3.131	-1.259	3.446	7.721	3.161	7.506	3.100	7.647	3.126	7.578	3.136
LifeBetterMost	6.982	3.444	-.890	2.487	7.240	3.443	6.741	3.427	7.202	3.375	6.789	3.491
ThingsLifeExcellent	8.109	2.845	-1.600	4.612	8.491	2.669	7.751	2.957	8.297	2.698	7.945	2.957

Frequency items were evaluated on a four-point frequency scale ranging from 0 (Not at all) – 3 (Every day)

Items on the SLSS were evaluated on an 11-point scale ranging from 0 (Not at all agree) – 10 (Totally agree)

Table 3 Fit indices for the confirmatory factor, structural, and multi-group structural equation models

Model	Chi-square	Df	<i>p</i> -value	CFI	RMSEA	SRMR
1. Initial Two Factor Model: Social Interactions	79.807	8	.000	.967	.063 (.051—.076)	.0375
2. Modified Two Factor Model: Social Interactions excluding item 6 (learning with friends)	13.636	4	.009	.995	.033 (.015—.053)	.0120
3. Initial Model: SWB	207.027	9	.000	.0961	.099 (.087—.111)	.0404
4. Modified model: SWB excluding item 4 and 5	8.531	2	.014	.998	.038 (.015—.066)	.0085
5. SEM Initial model	87.796	24	.000	.989	.034 (.27—.042)	.0180
6. SEM: Configural Model across age group	128.454	48	.000	.987	.027 (.022—.033)	.0222
7. SEM: Metric Model across age group	148.067	54	.000	.984	.028 (.023—.033)	.0276
8. SEM: Scalar Model across age group	188.146	60	.000	.979	.031 (.026—.036)	.0298
9. SEM: Configural Model across gender	139.252	48	.000	.985	.029 (.024—.035)	.0227
10. SEM: Metric Model across gender	157.159	54	.000	.983	.029 (.024—.034)	.0257
11. SEM: Scalar Model across gender	179.099	60	.000	.981	.030 (.025—.035)	.0265

loadings ranged between 0.59 and 0.79, which suggests that the items are reasonable indicators of the latent construct.

Structural Equation Modelling

The initial SEM for the sample using the pooled data displayed an appropriate fit (see Model 5 in Table 3; Fig. 1). The 'frequency of interactions' with 'family' and 'friends' latent variables contributed significantly to children's SWB, with SMC of 0.30. It is noteworthy that interactions with 'family' (0.49) made a stronger contribution to the variation in SWB than interactions with 'friends' (0.11) (see Table 4).

Multi-Group Structural Equation Modelling

We considered measurement invariance to determine the comparability of the model across age (10- and 12-years) and gender using MGSEM wherein configural, metric, and scalar invariance was assessed. The results show the tenability of measurement invariance as the fit statistics did not worsen beyond the identified threshold scores (see Models 6–8 in Table 3) as recommended by Cheung and Rensvold (2002) and

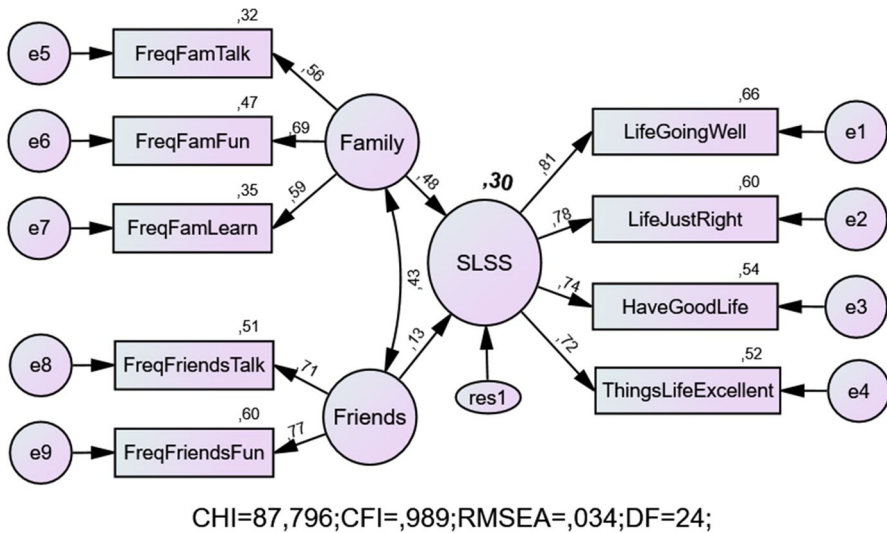


Fig. 1 Structural equation model using the pooled sample

Table 4 Standardized regression weights (Structural equation model)

Parameter		Estimate	Lower	Upper
SLSS	<← Family	,492	,413	,562
SLSS	<← Friends	,109	,039	,191
FrequencyFamilyTalk	<← Family	,566	,511	,610
FrequencyFamilyFun	<← Family	,688	,636	,725
FrequencyFamilyLearn	<← Family	,591	,543	,633
FrequencyFriendsTalk	<← Friends	,713	,648	,775
FrequencyFriendsFun	<← Friends	,772	,705	,838
LifeGoingWell	<← SLSS	,789	,750	,821
LifeJustRight	<← SLSS	,753	,716	,789
HaveGoodLife	<← SLSS	,740	,694	,778
HaveWhatWant	<← SLSS	,591	,544	,625
ThingsLifeExcellent	<← SLSS	,731	,693	,763

All values are significant at <.001

(Chen, 2007). Consequently, the scores across age groups and gender are comparable by regressions and mean scores.

For both the 10- and 12-year-old cohorts, the latent variables ‘frequency of interactions with family’ and ‘frequency of interactions with friends’ contributed 29% to the variation in children’s SWB. The standardised regression weights for the exogenous variable ‘frequency of interactions with family’ made a stronger contribution for both age groups (see Table 5). Furthermore, ‘frequency of interaction with friends’ showed a higher contribution for the 10-year-olds (0.17) than for the 12-years-olds (0.09) (see Table 5; Fig. 2).

Table 5 Standardized regression weights: (Measurement intercepts)

Parameter	10-Years-Old						12-Years-Old						Girls		Boys	
		Estimate	Lower	Upper	Estimate	Lower	Upper	Estimate	Lower	Upper	Estimate	Lower	Upper	Estimate	Lower	Upper
SWB	< --	.428	.303	.558	.505	.420	.589	.518	.424	.607	.456	.337	.574			
SWB	< --	.170	.054	.304	.086*	-.003	.170	.074 ^{NS}	-.020	.161	.163*	.036	.270			
FrequencyFamilyTalk	< --	.513	.450	.575	.575	.524	.623	.596	.545	.651	.525	.470	.582			
FrequencyFamilyFun	< --	.664	.607	.719	.715	.655	.771	.722	.668	.772	.650	.596	.712			
FrequencyFamilyLearn	< --	.564	.507	.621	.715	.655	.771	.615	.565	.669	.570	.516	.633			
FrequencyFriendsTalk	< --	.685	.613	.743	.610	.556	.658	.748	.678	.804	.662	.574	.736			
FrequencyFriendsFun	< --	.756	.693	.825	.779	.709	.853	.805	.722	.878	.734	.661	.801			
ThingsLifeExcellent	< --	.727	.675	.776	.735	.695	.777	.748	.709	.794	.707	.660	.764			
HaveWhatWant	< --	.551	.493	.604	.616	.566	.661	.624	.576	.672	.544	.490	.594			
HaveGoodLife	< --	.703	.644	.756	.764	.714	.809	.780	.739	.825	.963	.633	.744			
LifeJustRight	< --	.725	.672	.774	.770	.727	.817	.799	.750	.838	.702	.645	.750			
LifeGoingWell	< --	.774	.730	.820	.802	.759	.846	.826	.791	.860	.734	.679	.786			

NS = Not significant

* Significant at < .05; all other values are significant at < .001

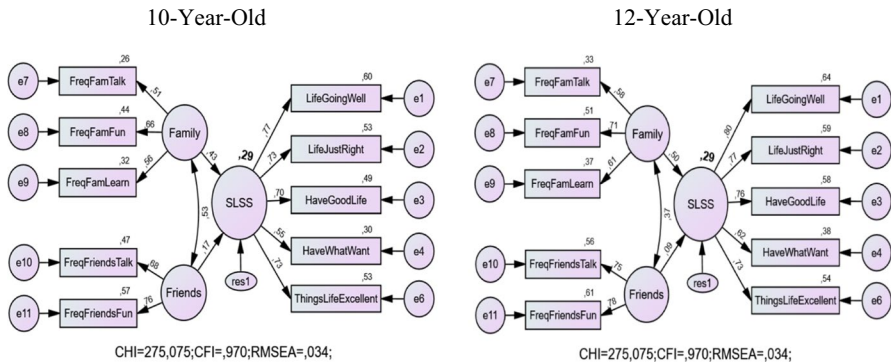


Fig. 2 Structural equation model: measurement invariance across age

Across gender, ‘frequency of interactions with family’ and ‘frequency of interactions with friends’ contributed 30% and 31% to the variation in children’s SWB for boys and girls respectively. The standardised regression weights for the exogenous variable ‘frequency of interactions with family’ made a stronger contribution for both boys and girls. (see Table 5; Fig. 3). Interestingly, for girls the contribution of the ‘interaction with friends’ was non-significant (0.07).

Discussion and Conclusion

The current study aimed to determine the variable influence of the frequency of children’s interactions with family and friends on their SWB; and to determine the extent to which these relations vary across two age groups (10-and 12-years) and gender. The findings confirm the critical role that social relationships with family and friends play in children’s lives. Congruent with previous empirical initiatives (see Goswami, 2012; Sarriera et al., 2018), we found a significant association

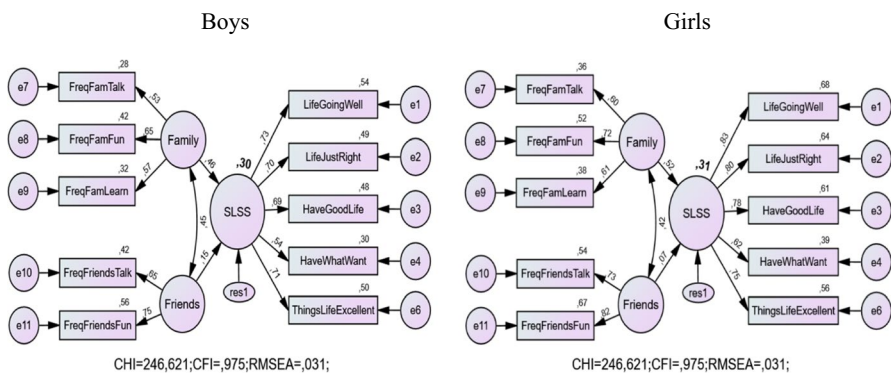


Fig. 3 Structural equation model: measurement invariance across gender

between children's frequency of social interactions and their SWB. An interesting finding was that a two-factor model presented with the best fit. This model included three items on 'frequencies of interactions with the family' (learning, fun, and talking) and two items on 'frequency of interactions with friends' (having fun and talking). While each of the latent constructs made a significant contribution, 'frequency of interactions with family' (0.49) made the highest contribution to SWB for the overall sample. This represents the most outstanding finding and is consistent with the findings of recent studies (Corominas et al., 2019; Savahl et al., 2020). Social service practitioners and those responsible for developing programmes and policies for children should foreground family relationships in their programme and policy offerings. While these findings resonate with previous studies, they are more fundamentally indicating that the frequency of interactions with family contributes significantly to the variation in children's SWB. In particular, we recommend increasing the nature and frequency of interactions between family members (parents and siblings) as a means to increase children's SWB.

Social Relationships Across Demographic Variables

MGSEM confirmed the attainment of scalar measurement invariance across age (10- and 12-year-olds) and gender (boys and girls), which endorses comparisons by correlations, regression coefficients, and mean scores. For the multi-group model, each latent construct contributed 29% to the variation in SWB for both the 10- and 12-year-olds; and 30% and 31% for boys and girls respectively. The latent variable 'frequency of interactions with family' presented with a stronger contribution for both age groups, as well as for both boys and girls. An interesting finding is that for the 12-year-olds, the contribution of the 'frequency of interactions with friends' was only significant at the 0.5 level; whilst for girls the contribution was not significant. These findings highlight the important role of family relationships over and above relationships with friends, and to a large extent they align to the findings of Goswami (2012) and Savahl et al. (2020). The findings are not suggesting that interaction with friends is not an important contributor to these cohorts of children; rather the frequency of interactions may be of less importance in the context of relationships with the family. It is likely that the nature, quality, or intensity of the interaction is of greater significance to their well-being.

In conclusion, the findings of the current study need to be considered within the particular social and historical context of South Africa. South African families are typically non-nuclear and constituted by a range of extended family members. The impact of colonialism and apartheid had lasting negative effects on families in South Africa (Sooryamoorthy & Makhoba, 2016). This was as a result of forced labour migration, land dispossession, and institutionalised oppression experienced by the majority 'Black' population. The adaptation to the changing family in this context is evident in the situation of children, parents, guardians, extended family members, and grandparents. Given the context of crime and violence in South Africa, this has engendered children living in adverse environments and conditions, ranging from unsafe homes and communities to unsafe schools (Savahl et al., 2015). Stable family

relationships, therefore, emerge as a haven of safety and security for children, at both the physical and emotional levels. As the current study suggests, it is making a substantial contribution to children's SWB.

Limitations and Recommendations

In the current study, we only examined the frequency of children's social interactions and not the nature or quality of the relationships. We recommend that future research studies explore the relation between the quality and intensity of social interactions and relationships on their SWB. Additionally, while we included a large study sample, the participants were only selected from one province (out of nine) in South Africa; the study findings should therefore not be generalised outside the parameters of the study sample (Savahl et al., 2020). Future research should endeavour to explore these constructs using a population-based sample. Given that the focus of the study was to examine the relation between frequency of social interactions and children's SWB, we did not include other micro and macro factors that could potentially influence this relation. Noting our findings, we hypothesise that social relationships could mediate the influence that other aspects of life have on children's SWB. Further research should thus focus on the interaction effect of social relationships on predictors of children's SWB in South Africa. While the results suggest the comparability of 10- and 12-year-old children, the study is restricted by the limited age range. Future research should include children across a wider range of age groups and across various contexts and language groups. Finally, our study only included a context-free measure of SWB. Future research should include domain-based SWB scales and affective measures, which would capture the full conceptual model of SWB.

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Declarations

Conflict of Interest We confirm no conflict of interest.

Competing Interests The authors declare no competing interests.

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