JUST WORLD BELIEFS, SENSE OF COHERENCE
AND PROACTIVE COPING IN PARENTS
WITH A CHILD WITH AUTISM

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2010
JUST WORLD BELIEFS, SENSE OF COHERENCE AND PROACTIVE COPING IN PARENTS WITH A CHILD WITH AUTISM

by

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Submitted in partial fulfillment of the requirements for the degree

MAGISTER EDUCATIONIS
(EDUCATIONAL PSYCHOLOGY)

in the
Department of Educational Psychology
Faculty of Education
University of Pretoria

SUPERVISOR:
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PRETORIA

August 2010
ACKNOWLEDGEMENTS

I would like to thank the following individuals for allowing me to pursue my dream:

🎨 My supervisor Dr Salomé Human-Vogel, who guided me through this process with compassion and excellence and provided me with the best possible environment to grow as a researcher. Dr Salomé, I would like to thank you for your words of encouragement, wisdom, experience and challenging me to deliver my best.

🎨 My supportive family who believed and encouraged me in me throughout my journey to this point. My mother who taught me the value of empathetic understanding and by her example how to be the best I can be. My father who taught me the value of critical thought and personal growth. My little sister who inspires and encourages me every day.

🎨 To Rein, thank you for being patient with this process, understanding the late nights and little time I had for us to the end. But most of all believing in me throughout.

🎨 To Le-Verne my friend, flat mate and partner in crime. Thank you for sharing with me the late night coffees, snacks and occasional wine. Your patience and encouragement was amazing.

🎨 My participants who shared their wisdom, insight and life experiences.

🎨 Adrie Van Dyk for the technical editing.

🎨 To my heavenly Father for inspiring me and displaying His ultimate love through the people I worked with, met in the process and the challenges I overcame.

---
I, Corné Jeanne Meiring (student number 23020157) hereby declare that all the resources consulted are included in the reference list and that this study titled:

Just world beliefs, sense of coherence and proactive coping in parents with a child with autism

is my original work. This thesis was not previously submitted by me for any degree at another university.

______________________

C.J. Meiring
August 2010
Parents of children diagnosed with autism, a disease characterised with difficulty in speech, behaviour and language, experience chronic stress more than in any other developmental disorder. Outcomes of chronic stress in this regard are often associated with uncertain expectations of the future where current stressors are exuberated and future expectations are negated. Thinking about the future has been noted to contribute positive psychological functioning. Authors have, however, noted that some parents of autistic children are able to conceptualise positive future expectations in the mists of stressful current realities whilst using proactive coping strategies. Proactive coping literature has predominantly focused on situational characteristics and, to a lesser extent, on dispositional characteristics. The relationship between dispositional characteristics - belief in just world, sense of coherence in relation to proactive coping is investigated in parents raising a child diagnosed with autism.

Constructs were operationalised through the Orientation to Life Questionnaire (Antonovsky, 1987), Global Belief in Just World Scale (Lipkus, 1991), Reactions to Daily Life Questionnaire (Greenglass, 2002) and a demographic questionnaire. A cross-sectional correlational design consisting of a sample of 30 \( (n = 30) \) parents with children with autism was conducted. SPSS ver12 was used for analysis, which included both descriptive and inferential analysis. Inferential statistics included the Independent T-Test and analysis of variance (ANOVA) to analyse independence of the sample, and Spearman Rho correlations were used to test possible correlations between constructs. The small sample size precluded more advanced statistical manipulation of the data. Open-ended questions were analysed through a process of content analysis.

The interpretation of results showed no significant differences between independent variables (e.g. age, gender, adjustment level of child) and constructs measured. Results of the correlational analysis indicated positive correlations between (i) belief in just world and...
proactive coping, (ii) sense of coherence and proactive coping as well as (iii) the sense of coherence (meaningfulness) subscale and proactive coping. No relationship was found between belief in just world and proactive coping. These results indicate that these dispositional characteristics can be associated with proactive coping and that belief in just world and sense of coherence share similar theoretical underpinnings though may have different predictor values. Qualitative results suggest that parents do engage in future-oriented thinking and do employ proactive coping strategies such as planning activities and social engagements.

This research, therefore, contributed to theoretical knowledge by providing insight into the relationships between the constructs by illustrating convergence and distinctiveness between constructs. Furthermore, knowledge was gained on the influence of dispositional characteristics on proactive coping strategies, seeing as how previous research primarily focused on situational characteristics. Practical applications of the results offer insight into coping processes of parents with autistic children, with specific reference to proactive coping, which ultimately alludes to the applicability of future-oriented therapeutic interventions for these families. Insight into the goals of parents and the daily challenges they face will, furthermore, assist the helping profession and support groups to provide effective support strategies.

KEY CONCEPTS

- Belief in just world
- Sense of coherence
- Proactive coping
- Autism
- Chronic stress
- Parents
- Fantasy Realization Model
- Goal commitment
- Cross sectional correlational study
- Salutogenesis
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CHAPTER 1
Introduction, problem statement and research question

1.1 INTRODUCTION

The way in which researchers conceptualise coping has changed significantly (Greenglass & Fiksenbaum, 2009). Researchers are increasingly interested in the role of positive affect in coping, particularly the way in which proactive coping contributes to wellbeing in contexts other than achievement contexts (Aspinwall, 2005). A specific context, in which future-oriented thinking and proactive coping improves wellbeing, is in individuals who experience chronic stress.

Literature indicates that parents raising children diagnosed with chronic illness or disability, with particular reference to an autism diagnosis, experience chronic stressors (Olsson & Hwang, 2002; Abbeduto, Seltzer, Shattuk, Krauss, Orsmond & Murphy, 2004; Bayat, 2007). These stressors are not only related to the adjustment of symptoms displayed by the child (Altiere & Von Kluge, 2009) and forming a secure attachment between the parent and child (Bayat, 2007), but also to re-evaluate belief systems and expectations about the future with regards to the attainability of long-term and short-term goals (King, 2006).

Future-orientated thinking has, however, been associated with good mental and physical outcomes even in the face of highly challenging situations associated with chronic stress (Aspinwall, 2005). In particular, future-oriented thoughts and feelings may serve to keep individuals actively and constructively engaged or committed to the pursuit of important outcomes or goals. The individual employing proactive coping strategies has been shown to accumulate resources, take steps to avoid resource depletion and is flexible enough to mobilise resources when necessary (Ouwehand, De Ridder & Bensing, 2008).

In addition, underlying theoretical assumptions of sense of coherence theory (Antonovsky, 1987) and belief in just world theory (Furnham, 2003) could be argued to influence the extent to which individuals engage in future-oriented thinking by believing that their world is manageable, comprehensible and meaningful (captured in Antonovsky’s sense of coherence construct), and that their investments will be justly rewarded (captured in belief in just world theory).
1.2 BACKGROUND

1.2.1 BELIEF IN JUST WORLD HYPOTHESIS

Belief in just world hypothesis prevalent in social psychological research explains how an individual’s perception of future aspirations and consequently commitment to it is influenced by their perceptions on how just the world is (Maes & Kals, 2002). In 1966 Lerner and Simons proposed that individuals experience a need to believe in a just world, where individuals get what they deserve and deserve what they get. When this belief is threatened by innocent suffering, individuals will be motivated to preserve this belief by helping the victim or alternatively psychologically defend their belief by, for instance, derogating the character of the victim so that the victim appears more deserving of his or her fate (Lerner & Simmons, 1966).

Just world beliefs originate in the general childhood learning processes of delayed gratification. Delayed gratification involves attempts to delay the gratification of immediate impulses in order to invest in long-term outcomes, and this process in turn informs an emerging personal contract (Begue, 2002). The personal contract stipulates that the child needs to forgo immediate gratification in order to maximise long-term rewards. In delaying gratification, and therefore behaving in a pro-social manner, the child in turn deserves and feels entitled to certain outcomes or rewards (Hafer & Begue, 2005).

Strong just world beliefs have been associated with life satisfaction, high self esteem, less “why me” questions, less self defeating behaviour and improved achievement in tasks due to heightened goal commitment processes (Dalbert, 1999; Dalbert & Stroeber, 2005; Furnham, 2003). A strong belief in a just world, therefore, is argued to serve an adaptive function where the individual is able to confront the world, as being stable and orderly (Dalbert, 1999). The belief that the world is orderly and stable promotes the individual’s sense of living in a meaningful world, in that the individual is not forced to cope and adapt behaviour on a regular basis according to random events (Dalbert, Lipkus, Sallay & Goch, 2001). In other words, events both positive and negative make meaningful sense, for it fits into a cognitive schema explaining everyday events.

Research by Tomaka and Blascovich (1994) indicates how just world beliefs alters coping processes. Firstly, they found that potential stressors are more frequently appraised as a challenge than a threat, which in turn helps to buffer stress reactions and, secondly, that individuals exhibit a pattern of physiological responses consistent with a challenge and not a threat. Lastly individuals with a strong belief in a just world tend to exert more effort and have greater confidence in completing a task or coping with accompanying stressors, ultimately
making them more successful in their efforts than the individuals who do not have a strong belief in a just world.

1.2.2 SENSE OF COHERENCE

Sense of coherence located in the salutogenic approach is different from traditional perspectives of health and disease, in that it is concerned with salutogenesis (\textit{salut} = wellbeing and \textit{genesis} = origin) rather than pathogenesis (\textit{pathos} = suffering and \textit{genesis} = origin) (Antonovsky, 1996). Whereas pathogenic approaches focus on locating the cause of illness, Antonovsky’s approach is more concerned with an understanding of which aspects benefit or promote health. Antonovsky (1996) defines sense of coherence as:

\begin{quote}
...the global orientation that expresses the extent to which one has a pervasive enduring, though dynamic feeling of confidence that one’s internal and external environments are predictable, and that there is a high probability that things will work out as well as can be reasonably expected (p.26).
\end{quote}

Sense of coherence theory stipulates that individuals progressing through life encounter various challenging situations in which they will either be able to cope with the accompanying stressors or be overcome by them. General resistance resources develop from learnt experiences in coping with stressors (Antonovsky, 1987).

Patterns in which general resistance resources develop inform three constructs of sense of coherence namely: \textit{Comprehensibility}, which involves the degree to which the individual perceives the world and stimuli (internal and external) to be predictable, ordered and explicable, secondly, \textit{manageability}, which is the degree to which an individual believes that he or she has the personal and social resources available to manage stressors and lastly, \textit{meaningfulness}, which involves the belief that demands and challenges are worthy of investment and commitment (Antonovsky, 1987).

Consistent experiences form the baseline of comprehensibility, and the person scoring high in this construct expects that stimuli encountered in the future will be predictable and, if not that, it will be orderable and explicable. A balance of overload and underload in life experiences informs the manageability construct where overload refers to situations, where individuals feel that they have inadequate resources to cope with life events and underload situations, where the individual does not have to exercise their abilities in order to reach their full potential. Meaningfulness refers to the importance of individuals shaping their destiny and day to day experiences, as well as committing to worthwhile future expectations. Meaningfulness is, furthermore, informed by consistent experiences of realities being comprehensive and manageable (Strauser & Lustig, 2003).
Literature mentions a trend of low sense of coherence levels on all three constructs in parents raising a child with autism. These findings are associated with feelings of inadequate information received on the diagnosis and uncertain future expectations in turn implying low comprehensiveness levels (Olsson & Hwang, 2002), and inadequate support from others, implying low manageability levels (Oelofsen & Richardson, 2006). Mak, Ho and Law (2007), furthermore, found that mothers of children diagnosed with autism display low levels of meaningfulness when they are forced to withdraw themselves from their careers or other activities previously or currently perceived as significant in their lives.

### 1.2.3 PROACTIVE COPING

Previously in coping literature the emphasis has mostly been placed on negative emotions associated with the initial appraisal of threats or the failure of coping efforts. However, recently researches are emphasising the role of positive emotions associated with coping, as well as how coping process is able to sustain positive emotions. Scharzer and Taubert (2002) describe proactive coping as the accumulation of general resources in order to facilitate the achievement of challenging goals associated with personal growth. The individual using proactive coping strategies envision a future which includes demands and challenges which are appraised as personal challenges. Coping, therefore, becomes goal management instead of risk management, in that individuals are not reactive but become proactive in managing their goals in order to reach personal growth. Proactive coping, furthermore, predicts outcomes such as fundamental independence, life satisfaction, engagement and optimism in future (Sohl & Moyer, 2009).

Proactive coping is linked to future-orientated thinking and future goal setting which, in turn, have also been linked to greater life satisfaction (Aspinwall & Taylor, 1997). Similar findings by Greenglass, Fiksenbaum and Eaton (2006) suggest that positive affect which is correlated with proactive coping, motivates individuals to solve problems in a creative and flexible manner. Problem solving skills associated with proactive coping include goal setting, planning, organisation and mental stimulation.

Literature on coping behaviours of parents dealing with their child’s autism diagnosis (Benson, 2010; Altiere & Von Kluge, 2009) found that these parents more often make use of proactive and future-oriented coping styles such as action coping and planning, than emotional based coping strategies.

Aspinwall and Taylor (1997), as well as Ouwehand, De Ridder and Bensing (2006) outline four advantages of proactive coping in the context of chronic stressors. Chronic stress is controlled because the accumulation of stressors is managed. Counterbalancing stressful
events in the early stages tend to diffuse the effects of chronic stress. Next, potential stressors are viewed in a positive light, thus helping to potentially limit distress. In addition, sufficient coping resources will be available when the anticipatory stressor occurs, seeing that resources are not exploited. Finally, additional coping options are present when proactive coping strategies are employed, as stressors are confronted before they are fully developed.

1.3 PROBLEM STATEMENT

A recent longitudinal study done by Benson and Karlof (2009) found that parents raising children with autism experience stress proliferation more frequently than parents of children diagnosed with other developmental disabilities and that stress proliferation in these parents usually leads to negative outcomes. Literature on chronic stress (Segerstrom & Miller, 2004; Holman & Silver, 2005) and experiences of parents with children diagnosed with autism (Cullen & Barlow, 2002) is indicative of uncertain or negative future expectations, where parents focus on current realities and negate future thoughts.

Research on parents of children diagnosed with autism by large associate uncertain future expectations with the difficulty in committing to long-term goals associated with the adjustment of parenting practices to the demands of the diagnosis (Blackledge & Hayes, 2007). The effectiveness of goal commitment is influenced by the likelihood of goal attainment, influenced by outcome expectations as illustrated in previous studies (Klein & Wesson, Hollenbeck, Wright & DeShon, 2001; Wofford, Goodwin & Premack, 1999). Literature on commitment (Ethcheverry & Le, 2005; Impett, Beals & Peplau, 2001; Le & Agnew, 2003) and goal commitment alike (Klein et al., 2001; Lock, Latham & Erez, 1988), furthermore, accentuates the importance of perceived control, resource availability and positive future expectations in committing to goals.

Research conducted by King (2006), however, found that some parents are able to reach positive belief change and future expectations. As mentioned earlier, literature on coping behaviours of parents dealing with their child’s autism diagnosis indicates a preference for proactive coping strategies (Benson, 2010; Altiere & Von Kluge, 2009). The aforementioned findings suggest that dispositional characteristics, such as belief in just world and sense of coherence, potentially lead to positive future aspirations and feelings of control and manageability over current realities which, in turn, influence the extent to which parents use proactive coping strategies.

In following the aforementioned argument, one could argue that a strong belief in a just world facilitating the commitment to long-term goals, will lead parents of children diagnosed with
autism to believe that their efforts will be rewarded in the future. Furthermore, in maintaining this belief, parents are arguably influenced to an equal extent to perceive their environment as predictable and meaningful, and that they have essential resources to cope with current stressful environments. Perceiving current realities as predictable, manageable and meaningful can also be located sense of coherence theory. Proactive coping as a self-regulatory mechanism, where goals are managed in order to facilitate goal attainment, is influenced by positive expectations of the future (related to belief in a just world) and the availability of personal and external resources (related to sense of coherence).

1.4 RATIONALE FOR STUDY

1.4.1 RATIONALE FOR MEASURING CONSTRUCTS WITHIN THE CHRONIC STRESS DOMAIN

Research on parental experiences of raising a child diagnosed with autism produces mixed results by indicating both positive and negative future expectations (Dale, Jahoda & Knott, 2006; Gray, 2006; King, 2006). Heiman (2002) states that more research is needed to clarify which mechanisms or variables facilitate either process. The exploration of possible relationships between belief in just world, sense of coherence and proactive coping within a future-orientated perspective may provide insight into mechanisms influencing the content and extent of future expectations.

Lazarus, as quoted in Olsson and Hwang (2002), states that the evaluation of a stressful situation is dependent on both dispositional and stressor characteristics. In other words, it requires both a stressful situation and a personal vulnerability to generate a stress reaction. Research focusing on the determinants of proactive coping responses have predominantly focused on situational characteristics (e.g. type of stressor), even though there is reason to believe that individual dispositional factors (e.g. sense of coherence and belief in just world) may also have an influence on proactive coping behaviour (Ouwehand et al., 2006). In a similar vein, authors (Surtees, Nicholas, Wainwright & Khaw, 2006; Ouwehand et al., 2008) argue that more research is needed in establishing how individual differences, influencing how stressful situations are appraised, interact with situational characteristics to produce proactive coping behaviour.

1.4.2 THEORETICAL RATIONALE FOR INVESTIGATING CONSTRUCTS

It is expected that there will be a positive correlative relationship between belief in a just world, sense of coherence and proactive coping. Underlying theoretical assumptions of each construct are argued to be similar within the context of future-oriented thinking and goal commitment processes. Literature related to future-oriented thinking (Aspinwall, 2005) and
goal commitment (Klein et al., 2001 Wofford et al., 1999) highlights the importance of goal feasibility (how capable individuals are to handle stressors in current reality), outcome expectations (the likelihood of attaining goals in the future) and active engagement in the management of goals in influencing the likelihood of goal commitment.

Belief in just world theory implies commitment to future goals or outcomes, in that positive outcome expectations are expected. In pursuing favourable future outcomes, the individual develops a cognitive schema which describes current realities as being structured because cause and effect follow a predictable pattern. The aforementioned cognitive schema consequently also leads the individual to believe that personal resources are available to reach favourable outcomes (Dalbert & Stroeber, 2005; Hafer & Begue, 2005), which by implication leads to perceived goal feasibility. Sense of coherence, as explained by Antonovsky (1996), depicts a similar theoretical stance where the individual copes with reality by perceiving the world as predictable, manageable and meaningful. Predictability and comprehensibility are argued to relate to structured realities and the perceived availability of resources contained in just world theory. Literature related to commitment in future outcomes or goals, in addition, mentions the importance of perceived meaningfulness of future outcomes (Le & Agnew, 2003), which leads one to expect a relationship between the meaningfulness construct of sense of coherence and outcome expectations as influenced by just world theory.

Proactive coping prevalent in future-orientation literature is associated with the management of goals instead of risks (Greenglass & Fiksenbaum, 2009). Goals are managed and resources accumulated with the future in mind, in order to pursue personal growth (Greenglass et al., 2006). Strong proactive coping behaviour is argued to affect goal feasibility by the accumulation of resources, and outcome expectations, in turn, are facilitated and influenced by future-oriented thinking associated with proactive coping.

1.5 PURPOSE STATEMENT

The purpose of the research is to explore the relationship between belief in a just world, sense of coherence and proactive coping in parents coping with chronic stressors in relation to their child’s autism diagnosis. A further purpose of this study is to determine whether demographic variables such as gender, marital status, religious affiliation and family rituals have an influence on these constructs.
1.6 RESEARCH QUESTION

Primary research question:

*What is the relationship between sense of coherence, belief in a just world and proactive coping in parents coping with chronic stress?*

The research question is examined by formulating hypotheses about the expected relationships between the dependent and independent variables in the study.

1.7 RESEARCH HYPOTHESES

1.7.1 FIRST SET: INDEPENDENCE OF SAMPLES (T-TESTS)

Hypotheses were formulated to test the independence of subgroups in the sample for gender, marital status, age, and family rituals.

- **Null hypothesis**: \( H_0 : \mu_{1,2} = 0 \)
  The means of subgroups analysed in the study will not differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis**: \( H_0 : \mu_{1,2} \neq 0 \)
  The means of subgroups analysed in the study will differ significantly from each other in terms of just world beliefs, sense of coherence and proactive coping.

1.7.2 SECOND SET: ANALYSIS OF VARIANCE (ANOVA)

Hypotheses were formulated to test analysis of variance by the simultaneous comparison of three or more demographical subgroups of each variable.

- **Null hypothesis**: \( \mu_a = \mu_b = \mu_c \)
  Comparisons of the various subgroups on a biographical variable will not differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis**: \( \mu_a \neq \mu_b, \neq \mu_c \)
  Comparisons of the various subgroups on a biographical variable will differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

1.7.3 THIRD SET: CORRELATIONS (SPEARMAN RHO)

Hypotheses were formulated to test the linear relationship between variables in the study.
Null hypothesis: $\rho_{xy} = 0$
There is no relationship between just world beliefs, sense of coherence and proactive coping.

Alternative hypothesis: $\rho_{xy} \neq 0$
There are statistically significant relationships between just world beliefs, sense of coherence and proactive coping.

The alpha level for all statistical tests was set at $p = 0.05$.

1.8 METHODOLOGICAL APPLICATIONS

1.8.1 PARADIGMATIC ASSUMPTIONS

Nieuwenhuis, in Maree (2007), describes critical realism as a paradigmatic perspective that forms part of post-positivism and occupies the space between positivism and constructivism. While positivism considers a singular concrete reality and interpretivism multiple realities, critical realism concerns multiple perceptions about a single, mind-independent reality that is not implicitly known to the researcher.

The critical realist aims to gain insight into unobservable causal powers affecting observable behaviour or thoughts in social actors. Objectivity is stated as a preferred goal, but recognition is given to the limitations thereof in research. Critical realists are, therefore, not value-free or value-laden but cognisant of how values inform perspectives of reality (Denzin & Lincoln, 1994). Social actors are given self agency, and knowledge of reality is informed by social interaction, but reality is not necessarily exclusively informed by these processes in that mediating realities influences perspectives of individuals (Krauss, 2005; Wuisman, 2005). Emphasis in critical realist research endeavours is, therefore, placed on exploration and explanation rather than prediction. The ideas of truth and evidence paramount in positivistic paradigms are, therefore, replaced by the search of evidence that is valid and reliable with reference to the existing phenomena rather than the generalisation of findings (Jefferson & King, 2009; Maree, 2007).

The acknowledgment of the stratified nature of reality and the emphasis placed on understanding rather than generalisation corresponds with the exploratory nature of this research. The major purpose of exploratory research is the clarification of ideas and methods, and the formulation of questions informing a later more precise study (Struwig & Stead, 2001), and does not necessarily imply the generalisation of findings (Babbie, 2005). Being cognisant of the fluid nature of reality and purposefully searching for alternative
explanations, as professed by critical realism, arguably facilitates the best background for exploratory research.

**1.8.2 RESEARCH DESIGN**

The research design serves the purpose of compiling a comprehensive plan or blue print on how the researcher intends to conduct research (De Vos, Strydom, Fouche & Delport, 2003). I utilised a cross sectional correlational design which is frequently employed in exploratory research, where the researcher is provided with a snapshot of a population at one particular time as an alternative to the observation of the same population over an extended period of time. This allowed me the advantage of gaining insight into the presence of constructs present in parents at one particular stage, but prohibited me from making inferences regarding causal mechanisms or the development of constructs over time (Whitley, 2001).

**1.8.3 DATA COLLECTION**

**1.8.3.1 Participants**

Non-probability, purposeful sampling was used to select parents of children who have been diagnosed with autism for a period of at least two years. Non-probability sampling involves procedures in which respondents are selected to be part of a study because they possess some characteristics that are of theoretical interest to a study (Babbie, 2005). The respondents in the present study were selected because literature suggests that parents of children diagnosed with autism are likely to experience chronic stress (Altiere & Von Kluge, 2009; Meyers, Mackintosh & Goin-Kochel, 2009; Higgins, Bayley & Pearce, 2005).

Sample size considerations were influenced by the purpose of the study and nature of population investigated (Maree, 2007). The purpose of this study is influenced by its exploratory nature, in which preliminary investigations are made into relatively unknown areas of research, which in turn implies a flexible inductive process (Terre Blanche, Durheim, & Painter, 2006). Sample size was, therefore, mostly determined by availability of participants. Maree (2007), furthermore, recommends a minimum of thirty participants in correlation studies, which served as a general guideline.

**1.8.3.2 Research instruments**

The psychometric properties of scales utilised to operationalise the constructs belief in a just world, sense of coherence and proactive coping can be summarised as follow:
TABLE 1.1: Table summary of research instruments

<table>
<thead>
<tr>
<th>Instruments that will be used</th>
<th>Global belief in a just world scale (Lipkus, 1991), Orientation to Life (Sense of coherence) (Antonovsky, 1987) and Reactions to Daily Life Questionnaire (Proactive coping) (Greenglass, 2002).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilised in research</td>
<td>All measures have been utilised extensively in international research. The Orientation to Life Questionnaire has been found to be culturally appropriate in South African populations (Wissing &amp; Van Eden, 2002).</td>
</tr>
<tr>
<td>Sample question</td>
<td>Global Belief in Just World scale: “I feel that people get what they deserve”, Orientation to Life Questionnaire: “How often do you have feelings that you cannot control”, Reactions to Daily Life Questionnaire: “I let things work out on their own”.</td>
</tr>
<tr>
<td>Psychometric properties</td>
<td>Global Belief in Just World Scale: Reliability from 0.86 to 0.85 (Lipkus, 1991), Orientation to Life Questionnaire: Reliability from 0.70 to 0.98 (Eriksson &amp; Lindstrom, 2005). Reactions to Daily Life Questionnaire: Reliability from 0.71 to 0.81 (Sohl &amp; Moyer, 2009).</td>
</tr>
</tbody>
</table>

The biographical questionnaire accompanying the scales consisted of both structured and unstructured questions focusing on the following aspects:

- Basic demographic information (age, location, marital status, gender, religious activities, adjustment level of child) (V1-V10).
- Sources of stress and support in coping (V11-V42, V50-V51).
- Coping responses (coping strategies) (V43-V44).
- Family rituals (birthdays, holidays and dinner time) (V45-V49).
- Future aspirations (for both child and self) (V52-V53).
- Goal setting (V54-V55).
- Goal commitment (V56).

1.8.3.3 Research procedures

Permission was obtained from the Department of Education (Appendix 1), to approach a school specialising in learners diagnosed with autism. The data collection pack (Appendix 2-5), including the letter of informed consent (Appendix 6), was delivered to the deputy principal, who distributed it to parents of all learners via the class teachers. In addressing a poor response rate from the school, I joined various internet forums for parents with children diagnosed with autism and posted advertisements on internet websites to potential participants outlining the purpose of the research, which, in turn, improved the response rate. An alternative school was also approached and a support group meeting was also attended.

1.8.3.4 Data analysis

Descriptive statistical procedures were conducted to organise and summarise data (Maree, 2007). Descriptive statistics do not make any inferences or predictions, but simply describes
the characteristics of the sample (Cohen, Manion & Morrison, 2007). Two main objectives of
descriptive analysis which influenced analysis were to describe the sample and to establish
the distributional properties of data (Whitley, 2001).

Descriptive statistics that were calculated in this study include measures of centrality (means,
medians) and variability (standard deviations). The reliability of the scales in the study was
investigated using Cronbach’s alpha and item-analyses. Chi-square analysis was used to
examine the independence of means for categorical independent variables (Maree, 2007).

Inferential statistics including a correlational analysis was conducted to investigate possible
relationships between investigated constructs (Whitley, 2001). Scatterplots were used to
investigate the linearity of relationships and Spearman’s Rho was used to investigate the
relationships between the dependent variables on a Likert-type scale. Independent samples
T-Tests were used to test significant differences in the scale means of subgroups (e.g.
gender) in the study, and a one-way analysis of variance (ANOVA) was used to analyse
significant differences in the scale means of three or more subgroups (e.g. marital status).
The small sample size ($n = 30$) precluded more advanced statistical manipulation of the data.

Content analysis was conducted on open-ended questions to analyse responses in relation
to variables such as:

- Additional supportive needs of participants.
- Coping strategies used by parents.
- Precautionary measures in preventing future stressors.
- Daily challenges parents face.
- Lessons learnt in raising an autistic child.
- Future expectations for the child.
- Future expectations parents have for themselves.
- Goals of parents.

1.8.3.5 Ethical procedures

De Vos et al. (2003) state that human beings are the objects of study in the social sciences
and that unique ethical consideration has to be taken into account. Firstly, approval was
granted by the Ethics Committee of the Faculty of Education from the University of Pretoria,
stipulating that all ethical concerns have been taken into consideration (Appendix 9).
Informed consent was obtained from participants in which information regarding the goals,
procedures, advantages, disadvantages of the present study and expectations from the
participants were conveyed. Participants were encouraged to ask questions regarding the
study at any time and contacting details were provided of relevant parties. Participation was
entirely voluntary, for no inducements to participate were offered and it was stated that participants could withdraw their participation from the study at any point in time. Privacy of participants was insured by providing them with the option of participating anonymously and keeping results confidential.

1.9 DEFINITION OF TERMS

1.9.1 COMMITMENT

I concur with the Impett et al. (2001) definition of commitment as “the degree to which an individual experiences a long-term orientation toward a relationship or a goal, including the desire to maintain this for better or for worse” (p 312). I, therefore, define commitment is a process by which a person invest in future outcomes by making decisions or taking actions that are consistent with goal commitment processes.

1.9.2 FUTURE-ORIENTED THINKING

Aspinwall (2005) defines future-orientated thinking as the plans, goals, daydreams, aspirations, hopes and worries that individuals have with regards to a goal or event in the future. Future-oriented thinking is, therefore, present in all individuals in that it guides behaviours in current realities and motivates individuals to set goals.

1.9.3 PROACTIVE COPING

Sohl and Moyer (2009) mention that proactive coping is referred to either as the avoidance of threats in the future, or to a process accompanied by positive affect where goals are set and achieved. For the purposes of this study I agree with authors (Greenglass & Fiksema, 2009; Schwarzer & Taubert, 2002) when they define proactive coping as the accumulation of resources and setting of goals in order to meet challenges associated with personal growth in the future.

1.9.4 BELIEF IN A JUST WORLD

Authors (Lipkus 1991; Begue, 2002; Hafer & Begue, 2005) define belief in a just world as the general human motive to believe that the world is just and that individuals get what they deserve. This allows individuals to invest in long-term goals and enables them to confront their environment as being stable and orderly.
1.9.5 **SENSE OF COHERENCE**

Sense of coherence is defined by Antonovsky (1996) “as a global orientation that expresses the extent to which an individual has a pervasive and enduring feeling of confidence that the stimuli deriving from the internal or external world is comprehensive, manageable and meaningful” (p.26). Sense of coherence therefore does not refer to a specific coping reaction but the capacity of the individual to select an appropriate coping response.

1.9.6 **AUTISM**

The DSM–IV-TR (American Psychiatric Association, 2000) defines autism as “the presence of marked abnormal or impaired development in social interaction and communication and a markedly restricted repertoire of activity or interest” (p 70). For the purpose of this study autism will, therefore, refer to a formal diagnosis made according to symptoms as outlined in the DSM-IV-TR.

1.10 **CONTRIBUTION OF STUDY**

The potential significance of this study relates to furthered theoretical and methodological understanding and practical application value. Theoretical clarification on the relationship between the constructs belief in a just world, sense of coherence and proactive coping by means of a correlational analysis, will contribute to existing research by illustrating convergence and distinctiveness between constructs. Furthered understanding on how chronic stress influences sense of coherence levels, as well as clarification of the temporal characteristics of sense of coherence within a future-orientated context, is expected to contribute to existing sense of coherence literature. Knowledge will be gained on the association between dispositional characteristics and proactive coping strategies, especially seeing as how proactive coping research primarily focuses on situational characteristics. The research instruments Reactions to Daily Life Questionnaire and Global Belief in Just World will also be utilised in a South African sample and this will contribute to literature on the appropriateness of these measures in a South African population because these instruments have to the researcher’s knowledge (which is based on an extensive literature review) not been utilised in a South African population. Practical application of the results may offer insight into coping processes of parents of children diagnosed with autism with specific reference to the usefulness of proactive coping. Insight into the goals of parents and the daily challenges they face will, furthermore, assist the helping profession and support groups to formulate effective support strategies for these parents.
1.11 CHAPTER OUTLINE

Chapter 1
This chapter provided a discussion of the background of the study. The rationale for the study was deduced from the problem and purpose statement to highlight my research aims. Methodological considerations the research hypotheses as well as the possible significance of the study was discussed.

Chapter 2
This chapter provides an in depth literature review on autism as a diagnosis, challenges that parents face, chronic stress and its influence on future-oriented thinking and goal commitment processes in parents with children diagnosed with autism. The purpose of this discussion is to provide a context in which the constructs under investigation potentially coexist. The Fantasy Realization Model is offered as a theoretical model, illustrating how parents may be enabled to commit to expectancy-based goals in considering both current and future realities.

Chapter 3
A literature review of sense of coherence, belief in just world and proactive coping are discussed in Chapter Three. Possible relations between constructs are mentioned and discussed as determinants of goal commitment within the Fantasy Realisation Model. A conceptual framework, integrating understanding of possible relationships between constructs, is provided at the end of the chapter.

Chapter 4
Chapter Four includes a discussion of the research design, as well as other methodological considerations. Measures by which constructs are operationalised are discussed as well as sampling and data collection procedures. Data analysis procedures including descriptive and inferential statistical procedures as well as content analysis are discussed.

Chapter 5
The presentation of research results derived from data analysis will be presented in Chapter Five.

Chapter 6
In this chapter the summation of findings will be discussed as well as its relevance to the research question. An attempt will also be made to locate and explore results further within
literature. The limitations of the study, as well as recommendations for future research, will serve as a conclusion.
CHAPTER 2
Literature review: autism, chronic stress and determinants of goal commitment

2.1 INTRODUCTION

This chapter includes a literature review on the contextual background of the chronic stressors that parents of children diagnosed with autism experience. This will be followed by a discussion of the Fantasy Realisation Model and determinants of goal commitment in order to understand how the constructs belief in a just world, sense of coherence and proactive coping potentially coexist within the context of chronic stress and future-orientated thinking.

2.2 AUTISM AS A PERVERSIVE DEVELOPMENTAL DISORDER

Autism is categorised as a pervasive developmental disorder (Barlow & Durand, 2005; Carr, 2009; Mash & Wolfe, 2002; Wenar & Kerig, 2007). Pervasive developmental disorders are associated with impaired social interaction, delayed language development and restricted behavioural repertoire. Pervasive developmental disorders included in the DSM IV-TR include autism, asperger’s disorder, rett’s disorder and pervasive developmental disorder not otherwise specified (American Psychiatric Association, 2000). Symptoms associated with these disorders typically emerge in children before the age of 3 years, and concern is usually raised by parents at 18 months when language development becomes an important consideration (Kaplan & Sadock, 2007). Autism, specifically, is best known for impaired capacity in language comprehension, lack of response to social cues, delayed language development and restricted, stereotypical behavioural patterns (Kaplan & Sadock, 2007).

2.2.1 EPIDEMIOLOGY OF AUTISTIC DISORDER

There appears to be some disagreement in literature with regards to the prevalence rate of autism in children. The DSM-IV-TR states that 5 out of every 10,000 children are likely to develop the disorder (American Psychiatric Association, 2000) whilst others (Bogdashina, 2006; Wenar & Kerig, 2007), mention a prevalence rate of 3 – 4 out of every 1000 children. Literature at large however, reflects an increase in the prevalence rate of autism in recent years (Adams, 2007; Bogdashina, 2006; Neisworth & Wolfe, 2005). Authors (Carr, 2009; Wetherby & Barry, 2000), argue that the increase in prevalence rate can be attributed to an increase in populations studied and the broadening of diagnostic criteria. Nonetheless, the increased amount of children diagnosed with autism could be argued to necessitate more research, to increase the existing knowledge base on constructs related to chronic stress that parents face. Increased knowledge, in the aforementioned areas, could assist caregivers
and parents to optimise their efforts in dealing with the challenges associated with an autism diagnosis.

2.2.2 Etiology

Previously, the causes of autism were attributed to parental practices such as “cold mothering practices”. Recently, however, this argument has been refuted by proving that there are no significant scientifically proven differences in child rearing practices between parents of children diagnosed with autism and parents of other children (Barlow & Durand, 2005). Other theories on causal factors that are unsupported include peri-natal complications such as bleeding in the first trimester, meconium in the amniotic fluid and immunisation against measles, mumps and rubella (Carr, 2009; Kaplan & Sadock, 2007; Lathe, 2006).

Recent research is mainly focussed on biological and genetic factors. Some evidence has surfaced in support of a genetic predisposition for the development of autism with the risk of parents having a second child with autism ranging between 3% and 7% (Adams, 2007). Carr (2009) mentions four biological markers associated with autism: firstly, the presence of larger brain size in toddlers in comparison to controls (up to 10%) which is not associated with a higher IQ and diminishes with age; secondly, brain centres processing emotions (amygdala) and facial expressions (fusiform face area), which are less active in autism populations; thirdly, the unsuccessful regulation of serotonin, and lastly the high occurrence of co-morbid epilepsy with an onset in early childhood or late adolescence.

Cognitive theories related to autism are divided in broad-band and narrow-band theories. Broad-band theories named central coherence theory, discusses difficulty in information input and executive functioning involved in problem solving output, while narrow-band theories implicate social cognition in that individuals with autism lack theory of mind, including ineffective representations of mental states (Carr, 2009).

2.2.3 Diagnosis and Clinical Features

The symptomatic features of autism consist of social impairment, language delays and repetitive behaviours. These features will be discussed in following sections. The DSM-IV-TR provides the following diagnostic criteria for autism:

A. A total of six (or more) items from (1), (2) and (3), with at least two from (1) and one each from (2) and (3):
   (1) Qualitative impairment in social interaction, as manifested by at least two of the following.
       (a) marked impairment in the use of multiple nonverbal behaviours such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction.
       (b) failure to develop peer relationships appropriate to developmental level.
(c) lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g. by lack of showing, bringing, or pointing out objects of interest.
(d) lack of social emotional reciprocity.

(2) Qualitative impairments in communication as manifested by at least one of the following.
(a) delay in, or total lack of, the development of spoken language (not accommodated by an attempt to compensate through alternative modes of communication such as gestures or mime).
(b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others.
(c) stereotypical and repetitive use of language or idiosyncratically language.
(d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

(3) Restricted repetitive and stereotyped patterns of behaviour, interests, and activities, as manifested by at least one of the following.
(a) encompassing preoccupation with one or more stereotyped and restricted patterns of interests that is abnormal either in intensity or focus.
(b) apparently inflexible adherence to specific, non-functional routines or rituals.
(c) stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole body movements).
(d) persistent preoccupation with parts of objects.

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to the age of 3 years: (i) social interaction, (ii) language as used in social communication or (iii) symbolic or imaginary play.

C. This disturbance is not better accounted for by Rett’s Disorder or Childhood Disintegrative disorder.

(American Psychiatric Association, 2000, p75).

2.2.4 SOCIAL IMPAIRMENT

In their study, Wing and Atwood (1987), categorise the social impairment of children into three types. The first type is called the aloof child who tends to live an isolated life, where the child does not respond to social interactions with others. Aloof children tend to make an active effort in avoiding all social contact and do not respond to caregivers with excitement or interest and other people are approached in a primary effort to satisfy an instrumental need. The second group includes the passive child who accepts others’ social interactions but does so in a submissive or indifferent manner and social interaction is often seen as a task that forms part of daily routine rather than spontaneous pleasure. Thirdly, the odd child who is interested in social interaction but does not have sufficient understanding of the appropriate norms of behaviour expected.

Carr (2009) mentions that children diagnosed with autism often experience difficulty in establishing attachment relationships with their parents, which includes the inability to use parents as a secure emotional base. This is attributed to children diagnosed with autism being unable to acknowledge or differentiate important people in their lives from others.
Lack of empathy, disinterest in sharing positive emotions and non-existent peer relationships are also distinctive features of social impairment.

Adolescents diagnosed with autism often desire friendships, but their difficulties in recognising and responding to emotional cues complicate this task. These adolescents often find themselves in social situations where they feel isolated and consequently act awkwardly, thus isolating themselves. Sexual feelings are experienced, but the adolescent is unable (due to their underdeveloped social skills) to develop sexual relationships (Kaplan & Sadock, 2007).

2.2.5 LANGUAGE OR SPEECH IMPAIRMENTS

Language development in children diagnosed with autism is usually delayed and communicative or language impairments range from communicative to non-communicative speech (Carr, 2009; Wenar & Kerig, 2007). Speech difficulties are not related to a lack of motivation or reluctance to converse, but rather to an inability to construct meaningful sentences even in the presence of large vocabularies (Adams, 2007).

Characteristics of non-communicative speech may include echolalia, where words used by others are repeated with little comprehension of the meaning of the words, and, idiosyncratic speech including the utterance of phrases or sentences that are irrelevant to a particular situation (Carr, 2009). Some children diagnosed with autism, use speech in an overly formalised or stilted manner, lacking prosody, where the child speaks in a monotone lacking emphasis on words that would be indicative of emotion and meaning (Adams, 2007).

2.2.6 REPETITIVE OR STEREOTYPICAL BEHAVIOUR

Children diagnosed with autism tend to exhibit narrow patterns of interests and stereotypical bodily movements. These children may react negatively to change in their daily routine and try their best to preserve similitude in their environment and their own behaviour (Lathe, 2006). Sameness in own behaviour is established by self-stimulating behaviour in the form of repetitive bodily movements, or movements of objects. Regularity in the environment is the insistence that all activities take place at the same time and in the same way every day (Carr, 2009).

Mash and Wolfe (2002), argue that these activities are indicative of an effort to gain control over novel or unprecedented daily events or changes that are unexpected. Other authors (Neisworth & Wolfe, 2005; Lathe, 2006), argue that self-stimulation serves to excite the
child’s nervous system or, alternatively, that the environment is over stimulating and that these behaviours afford these children the opportunity regulate their responses.

### 2.2.7 Other Symptoms Associated with Autism

Additional symptomatic features include inappropriate emotional expression, explosive reactions to changes, hypersensitivity or hyposensitivity to sensory stimuli and ineffective problem solving skills (Barlow & Durand, 2005; Kaplan & Sadock, 2007). Carr (2009) states that over 75% of all autistic children have an IQ of below 70, limiting abstract thinking, which in turn could potentially lead to ineffective information processing and poor executive functioning. In addition, literature (Wetherby & Barry, 2000; Adams, 2007) mentions that autism is frequently accompanied by various other co-morbid disorders such as mental retardation, anxiety disorders, seizure disorders, enuresis and encopresis.

### 2.2.8 Developmental Course and Prognosis

The developmental course and outcome of autism in later years depends on language development and cognitive capacity. The general expected outcome for children with autism is poor, with 61% to 73% reaching adulthood and being able to live an independent life (Neisworth & Wolfe, 2005). Literature (Carr, 2009; Zager, 2005), states that there is no clinically proven cure available for autism. These authors suggest an intervention programme focusing on skills training for children to compensate for their difficulty in language, social skills and behavioural deficits. It is also recommended that parents receive support and guidance in how to cope with their children’s challenges in order to maintain wellbeing.

### 2.3 Challenges That Families Face in Raising an Autistic Child

Higgins et al. (2005) found that the family functioning of families in which children diagnosed with autism are present are marked by low levels of flexibility and cohesion, as explained in the Circumplex model. In the Circumplex model cohesion refers to the emotional bond that family members share with one another which are facilitated by boundaries within and around systems, the share of interest, recreational activities and decision-making. The flexibility dimension refers to the capacity for change in leadership roles and negotiation styles. It is important for families who experience stressful situations to maintain a balance in both flexibility and cohesion dimensions (Walsh, 2003).

One could argue that families of children diagnosed with autism are characterised by low flexibility dimensions (classified as rigid), and would therefore find it difficult to adjust systemic rules and family identity in order to accommodate changes associated with the
demands of an autism diagnosis. Low levels of cohesion in these family systems, furthermore, relate to underdeveloped interpersonal support between family members due to the emphasis on personal separateness and individualisation (Olson, 1999).

The presence of a child diagnosed with autism in a family has furthermore been documented to affect non-disabled siblings. Conger, Stocker & McGuire (2009) states the importance of sibling relationships in developing social, emotional and behavioural competencies. Literature (Seltzer et al., 2009; Hodapp & Urbano, 2007), however, illustrates that siblings of a child diagnosed with autism describe their relationship with their siblings as containing less positive effect in comparison to normal sibling relationships. Siblings of children diagnosed with autism were concerned about the autistic sibling’s future and reported less parental involvement in their own upbringing. Reduced social engagement and delayed communication (Yirmiya, Gamliel, Pilowsky, Feldman, Baron-Cohen & Sigman, 2006), as well as poor psychosocial adjustment (Macks & Reeve, 2007) have also been found to be present in non-disabled siblings.

Literature confirms that autism places considerably more stress on parents than any other developmental disorder (Altiere & Von Kluge, 2009; Meyers et al., 2009; Higgins et al., 2005), possibly because it is not accompanied by distinctive physical markers, as would be the case for some other disorders (Carr, 2009; Keen, Couzens, Muspratt & Rodger, 2010). Parents, furthermore, often find it difficult to form secure attachments with their child diagnosed with autism (Adams, 2007), and a lack of social support and understanding from other family members and society about the demands related to an autism diagnosis (Keen et al., 2010).

The nature of the diagnosis and course of the disorder, furthermore, implies lasting difficulty through all developmental phases, implying ongoing belief adjustment and a commitment to goals on intensified parental intervention (King, 2006). Ambiguous information from health professionals with regards to unclear or delayed diagnosis and intervention plans, furthermore, elevates stress levels in parents (Margalit, Reviv & Ankoning, 1992). Financial concerns on the provision of adequate care for the diagnosed child have also been found to increase stress levels in parents (Mori, Ujiie, Smith & Howlin, 2009).

Parents of children diagnosed with autism tend to experience feelings of anger, shock, guilt, frustration and resentment (Keen et al., 2010). Predominant states of low self-esteem and feelings of inadequacy in being unable to meet the unique demands of the diagnosed child have also been documented (Cullen & Barlow, 2002). Chronic stressors of parents have been proved to exacerbate or initiate parental psychopathology, with special reference to
mood and anxiety disorders and substance abuse (Daniels, Forssen, Hultman, Cnattingius, Savitz & Feychting, 2008; Keen et al., 2010). Marital discord and dissatisfaction have also been documented in some married couples (Altiere & Von Kluge, 2009; King, 2006; Lee, Lopata, Volker, Thomeer, Nida & Toomey, 2009).

2.4 THE EFFECTS OF CHRONIC STRESS ON PARENTS

Chronic stress is distinct from other types of stress in terms of its duration and course as it tends to be pervasive and continues indefinitely (Segerstrom & Miller, 2004). Gotlieb (1994) describes chronic stress as “...the problems and issues that are either so regular in the enactment of daily roles and activities, or so defined by the nature of daily roles or activities, that they behave as if they were continuous to the individual” (p 4). Psychological consequences of chronic stress relates to changes in identity or social roles in order to adapt to constant stressors (Zillmer & Spiers, 2001), and primarily relates to changes in beliefs and expectations (King, 2006).

Stress proliferation in parents raising children diagnosed with autism may lead to depressive symptoms, more so than in care giving of other disabilities (Benson & Karlof, 2009). Stress proliferation is defined as “tendency of an initial (primary) stressor or stressors to create additional (secondary) stressors in other affected areas of the individual's life resulting in increased psychological distress” (Benson & Karlof, 2009, p24). Research on biological changes in parents raising child diagnosed with autism furthers the argument for the presence of chronic stress. Biological markers, like premature cellular aging and disruptions of the hypothalmic-pituitary-adrenocortical (HPA) axis, due to the presence of high levels of cortisol, play a vital role in linking stress exposure to health problems also experienced by parents (Seltzer, Almeida, Greenberg, Savla, Stawski & Hong, 2009).

For example, Gotlieb (1994) describes how chronic stress characteristically leads to syndromal depression, and that these symptoms influence the capacity of individuals to seek social support at times when they need the support the most. His findings are supported by the integrated model for depression as discussed by Wenar and Kerig (2006), where individuals with low self esteem and low self efficacy induced by depression, avoid other individuals whilst other individuals distance themselves from the individual experiencing depression, ultimately leading to limited social support.

Furthermore, it is also noted by Gotlieb (1999) that chronic stress intensifies the impact of acute daily stressors, leading to greater vulnerability to display symptoms associated with anxiety. Additional evidence is also offered by Gotlieb (1999), for the interaction between
chronic and acute stressors, revealing that stress prevalent from ongoing challenges in one sphere of life can spill over to other spheres of life.

Avison and Gotlieb (1994) mention how the aforementioned combined effect of chronic stress and acute stress often influences coping efforts adversely. In dealing with the adaptive challenges of chronic stressors, individuals who suddenly face a severe short-term stressor may have more difficulty responding effectively, because of their depleted physiological and psychological energy levels.

2.5 CHRONIC STRESS AND FUTURE-ORIENTED THINKING

Literature on the perceptions and beliefs of parents with children diagnosed with autism, suggest that there exists significant uncertainty on parents’ behalf regarding what the future holds for them and their children (Cullen & Barlow, 2002; King, 2006). Furthermore, this notion is supported by literature on chronic stress which states that individuals experiencing chronic stress tend to selectively focus on current stressful situations and negate future thoughts (Segerstrom & Miller, 2004). Of course, thinking about future aspirations and outcomes is beneficial because of its capacity to direct goals, select positive futures and to induce the active management of goals (Oner, 2000).

Research done by Holman and Silver (2005), states that future anxiety may exist in individuals who are forced to deal with stressors on a daily basis. This predominantly negative view of future prospects prevents positive or motivational actions to be taken in current realities to commit to goals with regards to future outcomes, which in turn contributes to poor mental and physical health. Challenges associated with the autism diagnosis, as well as its developmental course, furthermore implies lasting difficulty through all developmental phases, implying ongoing belief adjustment and commitment to goals related to intensified parental intervention.

Nevertheless, having the capacity to think about future outcomes or expectations has been associated with positive outcomes such as goal setting, as well as providing incentive value to commit to future-oriented goals (Kahanna, Kahanna & Zhang, 2005). Aspinwall (2005) defined future-oriented thinking as “the plans, goals, daydreams and expectations that are the things that mental life is made of” (p203). Human beings, in general, are described as being able to think about future events in a flexible manner and that they are able to think of how future circumstances will affect others and themselves in current reality, as well as how current situations and decisions will lead to future outcomes (Aspinwall, 2005). These thoughts furthermore influence the capacity to actively make plans, and to commit to these plans by setting future-oriented goals in reaching favourable future outcomes (Oner, 2000).
Therefore, within the context of this study, I examine the underlying assumption that parents of children with autism experience chronic stress, and therefore exclusively focus on their current reality, while negating future thoughts. This would arguably lead to poor goal commitment and adjustment. Nonetheless, King (2006) found that some parents of children with autism are able to reach positive belief change and maintain future expectations whilst taking proactive actions in achieving goals. The Fantasy Realisation Model by Oettingen (1999), discussed in the following sections, depicts how these positive expectations and beliefs may originate in parents. In this model future-oriented thoughts are managed by mentally contrasting present realities and future expectations.

2.6 FUNCTIONAL TRADEOFFS BETWEEN CURRENT REALITIES AND FUTURE OUTCOMES

Previous research on goal commitment states that individuals strive for goals that are desirable and feasible. Desirability is related to the perceived pleasantness of the consequences of outcomes, and feasibility is related to likelihood of goal attainment. Social Cognitive theory by Bandura (1989) highlights the role of self efficacy, outcome expectations and generalised expectations in influencing expectations about the future which in turn guides future behaviour or choices. Hope theory in Snyder (2000) indicates that individuals who temporarily or chronically believe that they are able to attain their goals, who perceive themselves as being successful in general and that they feel prepared to face the future, are more likely to commit to goals than those who do not believe this. Oettingen (2000) and Oettingen and Golwitzer (2009), however, argue that the reasons for why these expectations at times do not exert the predicted influence on behaviour has not been adequately addressed.

Mediators for the expectancy-behaviour link mentioned by Oettingen (2000), include situational characteristics, the properties of expectations which are determined by the frequency of activation and the importance of expectations which is influenced by a person’s values, motives and needs. Even though the importance of needs, values and motives in committing to goals is acknowledged by Oettingen (2000), it is argued that the motivational significance of expectations rests to a large degree on how it is mentally elaborated. Research on delayed gratification (Shoda, Michel & Peake, 1990) as quoted by Oettingen (2000), illustrates that focusing on the more abstract qualities of an object makes delay easier than concrete representations, indicating that a reward can lose motivational significance when reflected on in certain ways, therefore implying the influence of self-regulatory mechanisms in judging the significance of an object or goal.
Self-regulatory approaches to goal attainment and commitment spell out processes by which perceived desirability and feasibility are translated into goal commitment (Oettingen, 2002). The Model of Fantasy Realisation, describing self-regulatory processes, identifies modes of thinking about the future that translates goal feasibility into goal commitment with subsequent goal striving. This self-regulatory process includes the mental contrasting of a desired future (outcome expectations) with the current reality (goal feasibility) that impedes its realisation (Oettingen 2002).

Oettingen (2000) specifies three routes in which an individual thinks about the future and applies self-regulatory mechanisms in committing to goals. One route results in expectancy-based goal commitment, whilst two other routes are unrelated to the individual’s expectations.

2.6.1 **EXPECTANCY-BASED ROUTE TO GOAL COMMITMENT**

According to Fantasy Realisation Model, individuals engage in mental contrasting when future outcomes are imagined, and current realities are taken into consideration to create a problem solving strategy. Newell and Simon (1972), as quoted in Oettingen (2000), distinguish between what they call subjective and objective problem spaces. The objective problem space constitutes of (1) the demands of the task, (2) the future and (3) impediments in reaching this future whilst the subjective problem space only includes the initial representation of the problem. Mental contrasting is theorised to match both problem spaces, therefore including both the feasibility of goal attainment and outcome expectations, which enables individuals to recognise that they would have to take action in order to reach desired future outcomes. Expectations of reaching future outcomes are therefore activated and influence goal commitment, where strong goal commitment should emerge when expectations for success are high and poor commitment when expectations for success are low (Oettingen & Stephens, 2009).

2.6.2 **EXPECTANCY-INDEPENDENT ROUTES TO GOAL COMMITMENT**

Expectancy-independent goals originate when individuals either solely envision the attainment of the wished-for future (indulging), or solely reflect on the impending reality (dwelling). In fantasising about a positive future, the desired future is enjoyed in the here and now and the contrasted reflections of current realities are neglected. The individual therefore fails to experience the necessity to act, and experiences of success are therefore not activated and used. Commitment should therefore be independent to perceived chances of success (Oettingen & Stephens, 2009).
Dwelling on negative aspects in current reality allows negative thoughts to turn into ruminations. Commitment to goals linked to future outcomes is therefore solely based on the negative incentive’s value linked to the aspects of impending reality. This process provides the individual with an exclusive outlook on the subjective problem space that does not correspond with the objective problem space. The objective problem space is therefore not subjectively accessible and a discrepancy between future and reality are not perceived and therefore no indication exists that actions are necessary or instrumental in achieving a desired future. Thus, there are no expectations for success and goal attainment and commitment, therefore, do not reflect the perceived likelihood of reaching the desired future (Oettingen & Stephens, 2009).

2.6.3 MECHANISMS OF MENTAL CONTRASTING

Oettingen and Stephens (2009) discuss energization as a mechanism of mental contrasting, influencing the commitment levels of individuals to expectancy-dependent goals. Energization refers to the effects of high outcome expectations on goal commitment processes, in that it leads to a strong motivation for action by means of expectation activation, propelling individuals forward in their quest towards goal attainment, which in turn leads to goal commitment. Planning for upcoming hindrances therefore, involves a process whereby individuals with high outcome expectations craft strategies in advance to control for obstacles in reaching preferred future outcomes by means of “if then” statements.

2.7 DETERMINANTS OF GOAL COMMITMENT

As discussed in the previous section, the Fantasy Realisation Model stipulates that goal commitment is influenced by self-regulatory processes related to the mental contrasting of current realities and future aspirations. Linked to this process is the feasibility of goal attainment, contained in current realities and outcome expectations of goal directed behaviour, located in future expectations. This section provides arguments of how constructs in the present research (sense of coherence, belief in a just world and proactive coping) could be understood within the Fantasy Realisation Model with regards to determinants of goal commitments.

2.7.1 GOAL FEASIBILITY

Goal feasibility is influenced by the individual’s evaluation of how capable they are in handling stressors present in current realities which in turn has been argued to influence goal commitment processes by inducing success expectations (Lock, et al., 1988). General coping theory with regards to coping mechanisms of chronic stress, similar to conditions
present in parents raising a child diagnosed with autism, equally proposes the importance of perceived control over stressors (Folkman & Moskowitz, 2004).

With respect to current realities, goal feasibility, therefore can be strengthened when individuals experience a sense of understanding over current life events and feel that they have resources at their disposal to manage their lives. In this study, feeling as if one understands what is happening to one, and that one has the resources to manage stress, is operationalised by sense of coherence theory (Antonovsky, 1996), which is described as a global orientation of individuals in which stress responses are influenced by the extent to which the individuals feel that stressors are comprehensible and that they have resources to their disposal to manage the stressor. Closely related to sense of coherence theory, is the belief in just world hypothesis (Lerner & Simons, 1966), in which an individual believes the world is justly organised around a reciprocal personal contract. Dalbert (1999) mentions that a strong belief in a just world leads to wellbeing by positively reconstructing one’s life according to personal theories on how to manage difficult life situations positively and that it leads to feelings of competence in recognising challenges as stable and orderly and predictable. Personal theories, in turn, also provide the individual with personal resources in dealing with challenges in the form of positive or adaptive responses to stress.

The Fantasy Realisation Model in Oettingen et al. (1999), states that individuals tend to recognise and utilise potential resources when they mentally contrast current realities and possible futures. Cognitive reappraisal, as part of the coping theory, resonates with this statement, where demand appraisals and resource appraisals are jointly considered in establishing equilibrium between the individual and the environment (Schwarzer & Taubert, 2002). Sense of coherence and belief in a just world theory, therefore, emphasise the influence of perceived availability and adequacy of internal and external resources in dealing with daily tasks perceived as being predictable. In turn these perceptions are argued to lead to goal feasibility which in turn increases goal commitment.

It is, therefore, possible to argue that the individual’s perceptions of current realities as being predictable and manageable are influenced by levels of sense of coherence and belief in a just world which, in turn, influences goal feasibility. Therefore, parents of children with autism experiencing high levels of resource availability and comprehensiveness are argued to have feelings of goal feasibility, heightening expectancy-based goal commitment.

2.7.2 OUTCOME EXPECTATIONS

A further determinant of goal commitment includes the perceived outcome expectations of goals (Klein et al., 2001; Lock et al., 1988; Wofford et al., 1999). As mentioned in the
previous discussion, outcome expectations are discussed in the Model of Fantasy Realisation as the future expectations of individuals in the likelihood in reaching their future goals (Oettingen, 1999). Within the present study, I argue that outcome expectations are influenced by the likelihood of goal attainment, as well as the perceived meaningfulness of goal outcomes for individuals. This argument is consistent with Human-Vogel's (2008) assertion that individuals tend to choose activities or goals that are consistent with their identity preferences.

Belief in the just world hypothesis is based on the argument that strong just world beliefs (based on a personal contract of reciprocity) allow individuals to invest in long-term goals. Thus, individuals believe that the long-term goals they invest in will be duly rewarded if they behave in ways that are in accordance with reciprocal principles of the personal contract. In short, the individual believes the world is just and behaves or sets goals in the present because they believe it will be rewarded in the future, thus mentally comparing (contrasting) the present and the future.

Literature on commitment (Ethcheverry & Le, 2005; Impett et al., 2001; Le & Agnew, 2003) and goal commitment (Klein et al., 2001; Lock et al., 1988; Wofford et al., 1999) furthermore emphasises the importance of perceived meaningfulness of goal commitment. Meaningfulness is defined as a person's generalised meaning in life, pertaining to their purpose or goals, values and beliefs about what is important (Skaggs & Baron, 2006).

A strong belief in a just world allows individuals to construct a meaningful world in which current realities are perceived as predictable, and actions taken by individuals contribute to outcome expectations judged worthwhile to the self (Dalbert, 1999). The meaningfulness component within sense of coherence theory (Antonovsky, 1996), similarly influenced by comprehensiveness and manageability, involves the belief that demands and challenges are worthy of investment which in turn leads to the motivation within an individual to actively engage in making sense of the world. Both just world beliefs and sense of coherence therefore inform meaningful realities and leads to an internal motivation to participate in goal directed behaviour in order to reach future outcomes. Human-Vogel and Mahlangu (2009) argue that commitment is a self-regulatory mechanism which in turn influences our intentions to act. Commitment to goals is influenced by the expression of one’s identity needs, which is in turn influenced by values and beliefs about what is important to the self. Therefore, it is argued in the present study that outcome expectations in the Fantasy Realisation Model are influenced by both self-regulatory meaning making processes influenced by identity constructs, and general outcome expectations related to the likelihood that goals will be achieved.
2.7.3 MECHANISMS OF MENTAL CONTRASTING

The Fantasy Realisation Model indicates an energization process whereby high outcome expectations lead to proactive goal attainment processes in order to eliminate potential hindrances to future goals. Strength of outcome expectations, the perceived likelihood that outcomes will be achieved has been argued to be associated with just world beliefs. The personal significance or meaningfulness of outcome expectations has been argued to be influenced by both the meaningfulness component of sense of coherence and just world beliefs.

Both strong just world beliefs and the meaningfulness component of sense of coherence theory have been associated with increased motivation of individuals to actively engage in the management of stress and life occurrences (Antonovsky, 1996; Dalbert, 1999). Equally, it has been argued by Human-Vogel and Mahlangu (2009) that individuals commit to goals that make meaningful sense and are consistent with their identity. In just world and sense of coherence theory, the individual furthermore perceives difficulties as challenges that can be overcome, indicating an upward-regulation of emotions associated with commitment processes, whereas pure coping efforts relate to the down-regulation of emotions (Human-Vogel & Mahlangu, 2009).

Proactive coping, prevalent in coping literature (Folkman & Moskowitz, 2004) as a new conceptualisation of coping, indicates future threats as meaningful opportunities for personal growth by actively managing goals in present reality. Whereas, previous conceptualisations of coping focused on risk management or the avoidance of stressors as a whole, proactive coping describes future risks in terms of it being a surmountable challenge which implicates the management of goals through active engagement (Greenglass, 2002). Individuals, therefore, employ mental contrasting and actively engage in proactive coping behaviour by managing goals in current realities which are based on future expectations perceived as meaningful.

2.8 CONCLUSION

Autism is known as a pervasive developmental disorder that influences the child’s functioning with regards to social, communicative and behavioural development. Developmental course implies long lasting difficulty and prognosis for children with autism is poor with 61% to 73% of children eventually living an independent life. Literature on parents of children with autism indicates challenges ranging from inadequate social support to parental psychopathology. In the present study I argue that parents raising children diagnosed with autism experience chronic stress influenced by stress proliferation.
One psychological consequence of chronic stress concerns the exclusive focus on current realities and the negation of future thoughts, which is well supported by a body of literature on parents raising a child diagnosed with autism. Future-oriented thinking has been associated with various positive outcomes, with specific reference to goal commitment which is in turn associated with positive adjustment. Indeed, research on positive adjustment in populations of parents of children with autism has indicated the usefulness of goal commitment in belief change (King, 2006).

In understanding how the aforementioned populations of parents manage chronic stress through goal commitment processes, I selected the Fantasy Realisation Model (Oettingen, 1999) as a theoretical framework. One of the primary assumptions of this model is that functional tradeoffs are made between present realities and future thoughts through a process of mental contrasting. In comparing present realities (goal feasibility) and future aspirations (outcome expectations), the individual is able to establish expectancy-based goal commitments. From a theoretical perspective then, a parent of a child diagnosed with autism is required to compare current challenges (e.g. chronic stress) and future aspirations (positive or negative with regards to self or child) in order to actively engage in goal commitments processes in order to reach favourable future outcomes. I consulted both coping literature and the Fantasy Realisation Model to establish which aspects in present realities, future aspirations and the management of goals could influence the aforementioned process, and these aspects were discussed as the determinants of commitment.

With respect to current realities, goal commitment is strengthened when individuals experience a sense of understanding of current life events and feel that they have resources at their disposal to manage their lives. In this study, feeling as if one understands what is happening to oneself, and that one has the resources to manage stress, is operationalised by sense of coherence theory (Antonovsky, 1987), which is described as a global orientation of a person in which stress responses are influenced by the extent to which the individual feels that the stressor is comprehensible and manageable. Closely related to sense of coherence theory, is the belief in a just world hypothesis (Lerner & Simons, 1966), in which an individual believes the world is justly organised around a reciprocal personal contract. In believing that behaviour will be rewarded and arranging one’s life around a personal contract, it is argued that external stimuli will be perceived as being comprehensive and that internal resources will be available to cope with stressors.

In thinking about future outcomes, I consulted literature on commitment and goal commitment, illustrating the importance of perceived meaningfulness of goals and the likelihood of attaining future outcomes. To operationalise these aspects I made use of both
sense of coherence and the belief in just world hypothesis. In believing that the world is just, the individual is willing to invest in long-term goals because of the existence of a reciprocal personal contract implying rewards for pro-social behaviour. The meaningfulness component of sense of coherence theory and meaningfulness derived from just world beliefs were argued to influence the extent to which goal commitment initiated. In committing to goals that are perceived as meaningful, one experiences a greater motivation to manage goals also expressed in just world and sense of coherence theory (Dalbert, 1999, Antonovsky, 1996).

Lastly, proactive coping as a construct was utilised to operationalise the energization effects of outcome expectations on mental contrasting. Proactive coping efforts are argued to be influenced by the likelihood of obtaining future outcomes and the perceived meaningfulness of outcomes. Commitment influenced by the meaningfulness component of sense of coherence theory and just world beliefs, influence individuals to perceive challenges as surmountable, thus leading to active pursuits in overcoming the perceived challenges.

In the following chapter I shall discuss literature pertaining to the three constructs chosen to operationalise determinants of commitment as discussed in the Fantasy Realisation Model. Sense of coherence, belief in just world and proactive coping furthermore have specific relevance to the present study in that I will use existing scales developed to measure these constructs in my data collection phase.
CHAPTER 3
Literature review on sense of coherence, just world beliefs and proactive coping

3.1 INTRODUCTION

In Chapter Two I conducted a literature review on autism as a disorder and the parents of children diagnosed with autism that experience chronic stress. The Fantasy Realisation Model and its relevance to goal commitment processes, by conjointly considering current realities and future aspirations, were discussed. This chapter contains a literature review on the constructs belief in a just world, sense of coherence and proactive coping in order to formulate a conceptual framework discussed at the end of this chapter.

3.2 SENSE OF COHERENCE

3.2.1 SENSE OF COHERENCE WITHIN THE SALUTOGENIC APPROACH

Sense of coherence is located in the salutogenic approach, which is different from more traditional perspectives of health and disease, in that it is concerned with salutogenesis (salut = wellbeing and genesis = origin) rather than pathogenesis (pathos = suffering and genesis = origin) (Antonovsky, 1996). The pathogenesis model is based on the fundamental assumption that stress is omnipresent and not an unusual occurrence, and the human system is seen as being unable to manage stressors (Antonovsky, 1987). Where pathogenic approaches focus on finding the cause of illness, Antonovsky’s salutogenesis approach is more concerned with an understanding of which aspects benefit or promote health. Even though stress promotes illness, it is argued that it is omnipresent and, therefore, cannot cause illness (Taylor, 2004). Salutogenesis furthermore places health on a health/disease continuum and rejects the traditional dichotomy between health and disease (Antonovsky, 1987). Antonovsky is, therefore, interested in how a person proceeds to the healthy end of the continuum in negotiating stress, health and coping. Illness and strain, are therefore, seen as growth opportunities to increase health and are therefore not directly related to illness. Emphasis in the salutogenic approach is placed on the use of potential and existing general resistance resources in adapting to stressors, and not only on how existing risk factors can be minimised (Eriksson & Lindstrom, 2005).

The salutogenic approach resonates with other positive psychological approaches, where focus is placed on how individuals maintain subjective wellbeing, handle stress and reach optimality in the midst of bombarding stressors present in everyday life (Viviers & Cilliers,
In the present study, sense of coherence is argued to influence the coping responses of parents of children diagnosed with autism dealing with chronic stress. Literature on sense of coherence levels in parents of children diagnosed with autism, furthermore, displays low sense of coherence levels, partially influenced by the extent of symptom of severity (Mak et al., 2007; Olson & Hwang, 2002). A strong sense of coherence was furthermore found to be associated with adaptive coping responses and acceptance of the diagnosis (Oelofsen & Richardson, 2006).

**3.2.2 STRUCTURE OF THE SENSE OF COHERENCE**

Antonovsky (1996) defines sense of coherence as:

...the global orientation that expresses the extent to which one has a pervasive enduring, though dynamic feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can be reasonably expected (p.26).

Other psychological constructs that endorse a salutogenic approach include self-efficacy (Bandura, 1989), hardiness (Madi, 2006), and locus of control (Rotter, 1990). Antonovsky, however, considers sense of coherence to be the cornerstone of the salutogenic approach, for its unique constellation of behavioural, cognitive and motivational aspects (Antonovsky, 1996). Emphasis placed on meaningfulness in sense of coherence, also makes it unique in comparison to constructs such as hardiness and self-efficacy (Breslin et al., 2006). Another distinguishing characteristic of sense of coherence, is that it is not culturally bound and relevant within any culture, for general resistance resources are available in most contexts and the human capacity to learn from experiences are also not context specific (Antonovsky, 1996).

High levels of sense of coherence imply that individuals progressing through life encounter various stressors and challenging situations in which they will be able to cope with stressors. By succeeding in coping efforts the individual develops general resistance resources that act as learnt experiences or ways to cope with stressors (Nel, Crawford & Roodt, 2004).

**3.2.3 GENERAL RESISTANCE RESOURCES**

General resistance resources are defined as “property of a person, a collective or a situation which is, as evidence or logic has indicated, successful coping with inherent stressors of human existence” (Antonovsky, 1996, p 15). These resources develop from a young age and are shaped by life experiences, characterised by consistency of experiences, participation in outcomes and learnt experiences of balancing wellbeing and tension relief in the under and
overload of stressors. These types of experiences lead individuals to believe that one can derive order out of chaos and, also, individuals with a strong sense of coherence are able to identify a greater variety of general resistance resources at their disposal (Strauser & Lustig, 2003). Different types of general resistance resources that are available to individuals include: physical, material, cognitive, emotional, attitudinal, interpersonal and cultural resources (Langeland et al., 2007). The key consideration, however, is not the amount or types of general resistance resources that are available but how well individuals are able to use and re-use them for intended purposes (Lindstrom & Eriksson, 2005).

General resistance resources facilitate the resolution of tension accompanied by stress, which is seen as a demand for which there is no readymade response available. An excess of tension is argued to lead to pathogenic outcomes, and stress is consequently described as the result of the inadequate resolution of tension and not merely the presence of stressors. The activation and utilisation of general resistance resources facilitates the resolution of stressors by providing feedback which enables a cognitive, instrumental and emotional understanding of the world. Stress is, therefore, the inadequate resolution of tension through general resistance resources (Taylor, 2004).

3.2.4 COMPONENTS OF SENSE OF COHERENCE

Patterns of utilising general resistance resources in coping with stressful situations inform the three components of sense of coherence as discussed by Antonovsky (1987). They are comprehensibility, which involves with the degree to which the individual perceives the world and stimuli (internal and external) to be predictable, ordered and explicable; manageability, which describes the degree to which individuals believe they have the personal and social resources to handle demands and meaningfulness, which involves the belief that demands and challenges are worthy of investment and commitment. Meaningfulness encapsulates the motivational aspect of sense of coherence (Antonovsky, 1996).

Consistent experiences form the baseline of comprehensibility and the individual scoring high on this dimension expects that stimuli encountered in the future and in present reality will be predictable, ordered and explicable. Manageability is developed by balancing the over and underload of stressors. Overload refers to situations where individuals feel that they have inadequate resources to cope with life events and, underload refers to situations where the individual is not required to exercise their abilities in order to reach his or her full potential. Experiences that require the individual’s participation in shaping outcomes inform the meaningfulness component. Meaningfulness refers to the importance of individuals feeling that they are able to shape their destiny and day to day experiences, which in turn, influences commitment levels to worthwhile future expectations (Strauser & Lustig, 2003).
Literature indicates a general trend of low sense of coherence levels in all three components in parents raising a child diagnosed with autism. These findings indicate insufficient information on the nature of the diagnosis, and the management thereof (Olsson & Hwang, 2002), as well as inadequate support from others (Oelofsen & Richardson, 2006), implying low comprehensiveness and manageability levels. Mak et al. (2007), furthermore, found that mothers of children diagnosed with autism experienced low levels of meaningfulness when they were forced to withdraw themselves from their careers, or other activities, previously or currently perceived as significant in their lives.

The meaningfulness component is of relevance to the present study since meaningfulness is associated with high levels of commitment and active engagement (Antonovsky, 1996). Research findings that indicated positive adjustment in parents furthermore found high levels of meaningfulness (Huws, Jones & Ingledew, 2001; Parkenham, Soffronoff & Samios, 2004). The meaningfulness component leads to an active search for comprehensiveness and resources in current realities. Sense of coherence is not considered a coping style in itself, however, individuals with a strong sense of coherence may be more likely to see problems as challenges, and therefore, be more motivated to select the most appropriate behaviour or goal to address challenges (Antonovsky, 1996) which is arguably similar to proactive coping.

The comprehensiveness component is also considered as important for as mentioned earlier, the appraisal and consequent reactions to chronic stressors is dependent on perceived predictability of stressors. Manageability, in turn, is of importance, for as mentioned earlier, parents of children diagnosed with autism tend to have limited resources (e.g. social support, emotional support and time). It is conceptualised in this study that the perception that one has sufficient resources and that stressors are predictable, leads to positive goal feasibility perceptions.

3.3 BELIEF IN A JUST WORLD HYPOTHESIS

3.3.1 BELIEF IN A JUST WORLD AS A CONSTRUCT

In 1966 Lerner and Simons proposed that people need to believe in a just world where individuals get what they deserve and deserve what they get. When this belief is threatened by innocent suffering, individuals become motivated to preserve this belief by helping the victim, or alternatively, psychologically defend their belief by, for instance, derogating the character of the victim so that the victim appears more deserving of his or her fate (Lerner & Simmons, 1966). In a recent meta-analysis of the just world literature, Furnham (2003) mentions three major trends in recent research on just world theory: firstly, the improvement
belief in just world scales, secondly, the investigation of a belief in a just world as a positive illusion contributing to positive health and lastly, the correlation between strong just world beliefs and long-term investments.

In the present study, I argue that just world beliefs leads to outcome expectations and perceived goal feasibility with relation to Fantasy Realisation Model. Current realities that are judged as stable and predictable are argued to lead to goal feasibility, and the belief that long-term goals will be attained to lead to outcome expectations. This process is, furthermore, argued to bring about expectancy-based goal commitment where current and future realities are mentally contrasted which, in turn, activates proactive coping behaviour in order to reach future outcomes.

One of the primary assumptions of just world theory is that individuals differ to the extent to which they believe in a just world. Research on personality correlates with just world beliefs, indicates significant correlations between belief in a just world and value systems, reaffirming conformity and security (Edlund, Sagarin & Johnson, 2007). Participants with a strong belief in a just world, tend to be more willing to trust other people, even though they still maintain a strong internal locus of control. The importance of research on personality characteristics lies in the confirmation of the belief in a just world as a dispositional characteristic that is reinforced and influenced by life experiences (Dalbert & Stroeber, 2005).

In following the above-mentioned personality correlates, as well as the general propositions within the theory it becomes clear that a strong belief in a just world serves an adaptive function, in which the individual is able to confront the world as being stable and predictable (Dalbert, 1999). Perceiving the world as stable and predictable in turn promotes the individual’s sense of living in a meaningful world, where the individual is not forced to cope and adapt their behaviour on a regular basis according to random events (Dalbert, et al., 2001). In other words, events both positive and negative make meaningful sense, for it is rationalised by means of the cognitive schema explaining everyday events.

3.3.2 A BELIEF IN A JUST WORLD AND LONG-TERM INVESTMENTS

Just world beliefs originate in the general childhood learning processes of delayed gratification. Delayed gratification involving the delay of immediate impulses in order to invest in long-term outcomes informs an emerging personal contract (Begue, 2002). By delaying gratification and behaving in a pro-social manner, the child in turn deserves certain outcomes and feels entitled to these outcomes or rewards. Developmentally, children are expected to learn that the world is a place where they need to earn what is desired and to adjust behaviour and decisions accordingly (Hafer & Begue, 2005). In following the aforementioned
argument, Maes and Kals (2002) state that a primary function of a just world belief is to provide individuals with the confidence to strive toward long-term, deserved outcomes. Begue (2002) mentions that people, for the sake of their own sense security and capacity to plan for future outcomes, need to believe that they live in a just world where they are sure that they will get what they deserve in the long run.

Theoretically, individuals should, therefore, be more willing to commit to long-term goals if they believe that they will be justly rewarded for their effort. A strong belief in a just world would imply that the individual predicts a favourable future and that he or she is willing to take the necessary pro-social steps in reaching this favourable outcome. Hafer and Begue (2002) argue that individuals will take all necessary steps (including the commitment to adaptive goals) to maintain a strong belief in a just world because the alternative leads to cognitive dissonance. In terms of the present study, parents of children diagnosed with autism with a strong belief in just world would arguably be more willing to commit to long-term goals due to high outcome expectations.

3.3.3 BELIEF IN A JUST WORLD AND COPING

Original work by Lerner and Simons (1966) stated that strong just world beliefs are associated with negative anti-social outcomes or behaviours in dealing with injustice, such as victim derogation (Hafer & Begue, 2005). In recent literature, however, one of the most interesting and perhaps important developments in belief in a just world research is the conceptualisation of just world beliefs as a healthy coping mechanism (Furnham, 2003). Research done on the correlates between a strong just world beliefs and mental health, have found strong just world beliefs to be associated with life satisfaction, wellbeing, high self-esteem, less “why me” questions, less self-defeating behaviour and better achievement in tasks due to heightened goal commitment processes (Dalbert, 1999; Dalbert & Stroeber, 2005; Furnham, 2003).

Dalbert (1999) discusses the following four reasons why a belief in a just world facilitates wellbeing. Firstly, a strong belief in a just world assists individuals to reconstruct their lives positively, in that the world is perceived as meaningful which in turn fosters competence and control. Secondly, a strong just world belief strengthens commitment to pro-social behaviour and goals in that individuals believe that their efforts will be rewarded, and that goals will attained. And lastly that just world beliefs act as a stabilising force, helping individuals deal with daily stressors, reducing depression and other stress induced illnesses. In terms of the present study, the implications of these findings suggest that parents of children diagnosed with autism with strong just world beliefs will view their current reality as being meaningful
and will experience feelings of competence and control in managing chronic stressors, which in turn would lead to healthy coping mechanisms.

Research by Tomaka and Blascovich (1994) explored how belief in just world beliefs alters coping processes in dealing with stress. Firstly, they found that potential stressors are more frequently appraised as challenges than threats, which in turn helps to buffer stress reactions. Secondly, that individuals exhibit a pattern of physiological responses consistent with a challenge. Lastly, that a individual with a strong belief in a just world tend to exert more effort and have greater confidence the completion of tasks and coping with the accompanying stressors, making them more successful in their efforts.

In terms of the present study, one may assume then that a strong belief in a just world, enables individuals to invest in long-term goals because they expect a meaningful positive outcome which is reminiscent of the meaningfulness construct of sense of coherence. In this study, I also argue that the stable and orderly perceptions of reality associated with strong just world beliefs leads to meaningful interpretations of reality, in the same way that comprehensiveness and manageability lead to meaningfulness in sense of coherence. This process would, therefore, inform evaluations of goal feasibility, and lead to the motivation to engage in goal directed behaviour. Just world beliefs arguably, furthermore, strengthen goal commitment by strengthening outcome expectations. It was mentioned earlier in the Fantasy Realisation Model that having positive outcome expectations about eventual goal attainment leads to goal commitment in individuals which in turn influences proactive goal directed behaviour.

3.4 PROACTIVE COPING

3.4.1 THE INTRODUCTION OF PROACTIVE COPING IN COPING LITERATURE

Folkman and Moskowitz (2004) describe coping as the thoughts and behaviours that people use to manage the external and internal demands of situations appraised as stressful. The process of coping is initiated when a person feels that important goals have been harmed, lost or threatened. In the coping literature the emphasis has mostly been placed on negative emotions accompanying the initial appraisal of stressful situations or the failure of coping efforts. However, more recent research is emphasising the role of positive emotions associated with coping, as well as the ways in which the coping process is able to sustain these positive emotions (Greenglass, 2002; Scharzer & Taubert, 2002).

The broadening of stress and coping literature, to include positive emotions, includes the search for meaning in stressful encounters by making sense of challenges and benefit
finding. Motivational dimensions of meaning-making include the pursuit of worthwhile goals, the actualisation of one’s potential, and the strife for personal growth. All of these characteristics are, furthermore, associated with proactive coping (Schwarzer & Taubert, 2002). Proactive coping is described as a process whereby quality of life is improved and meaningful actions are taken to alleviate stress, paralleling other research in positive psychology (Greenglass, 2002).

3.4.2 PROACTIVE COPING AS A CONSTRUCT

Literature on coping behaviours of parents dealing with their child’s autism diagnosis (Benson, 2010; Altiere & Von Kluge, 2009) illustrate that these parents often make use of active and future-oriented coping styles such as action coping and planning, in comparison to other emotion based coping strategies.

Literature mentions a difference between proactive coping, as conceptualised by Aspinwall and Taylor (1997), and by Greenglass (2002). The Greenglass (2002) definition describes proactive coping as a process where future goals are assessed and managed in order to achieve personal growth outcomes. Aspinwall and Taylor (1997) conceptualise proactive coping as a process whereby an individual prepares for future stressors by averting from them all together (Sohl and Moyer, 2009). In this study I make use of the Greenglass (2002) definition for its focus on goal management and personal growth.

Greenglass (2002) describes proactive coping as the accumulation of general resources in order to attain challenging goals associated with personal growth. Proactive coping includes future-oriented thinking where risks, demands and challenges are taken into consideration. Challenges are, however, not appraised as threats, but rather as opportunities for personal growth. Coping, therefore, becomes goal management instead of risk management, where individuals are proactive and not reactive in constructing plans of action in order to create and manage opportunities for personal growth. The proactive individual, therefore, ultimately strives for life improvement and proactive coping predicts outcomes such as fundamental independence, life satisfaction and optimism in future events (Sohl & Moyer, 2009).

Human-Vogel and Mahlangu (2009) describe commitment as a self-regulatory mechanism, different from coping, in that coping in general down-regulates negative emotions whilst commitment relates to the up-regulation of emotion. Proactive coping, therefore, is argued in the present study to be closely associated with goal commitment processes, in that commitment to proactive coping behaviour leads to positive well-being by up-regulating emotion.
3.4.3 TEMPORAL DIFFERENCES IN COPING

In the past, coping has been described as a reactive response to stressors; recently, however, coping is described as a process that can take place even before stress occurs (Greenglass, 2002). Both Greenglass (2002) and Schwarzer and Taubert (2002) distinguish between the following types of coping styles informed by temporal differences:

- **Reactive coping** of a stressor that has already occurred which involves the compensation of losses or harm.
- **Anticipatory coping** where imminent threats are dealt with.
- **Preventative coping** involving the accumulation of resources to reduce the severity of consequences associated with stress as well as to lessen the likelihood that the stressor will take place in the first place.
- **Residual coping** in coping with the long-term effects of a stressor which has already taken place.
- **Proactive coping** involving the accumulation of resources to facilitate the achievement of challenging goals and promote personal growth.

Both preventative and proactive coping involves similar behaviour responses such as skills development, resource accumulation and long-term planning. However, the motivation for coping efforts can emanate either from threat or challenge appraisal (Schwarzer & Taubert, 2002). Preventative coping (similar to Aspinwall & Taylor’s (1997) conceptualisation), is associated with measures to prevent future harm, whereas proactive coping involves challenge appraisals in which future events or threats are seen as opportunities for personal growth worthy of active participation (similar to the Greenglass (2002) definition).

3.4.4 PROACTIVE COPING, FUTURE-ORIENTATED THINKING AND GOAL COMMITMENT

Proactive coping is linked to future-orientated thinking and future goal setting (Aspinwall & Taylor, 1997). Greenglass et al. (2006) found that positive affect, which is correlated with both proactive coping and future-oriented thinking, promotes creativity and flexibility in problem solving, which in turn motivates an individual to solve problems. Skills associated with proactive coping include goal setting, planning, organisation and mental stimulation, which in turn influence proactive goal attainment behaviour.

Meaningfulness, included in sense of coherence theory, relates to the active engagement in the resolution of stressors, which in turn are perceived as challenges worthy of investment (Antonovsky, 1996). The individual with strong sense of coherence will, therefore, be more likely to perceive stressors as challenges and will be motivated to select the most appropriate behaviour or goal to solve a particular challenge (Antonovsky, 1996). It is argued, therefore,
that individuals with a strong sense of coherence are more likely to engage in proactive coping behaviours than individuals with a weak sense of coherence.

Perceived personal control over proactive efforts in current realities has, furthermore, been associated with the extent to which proactive coping takes place (Aspinwall, 2005). High levels of comprehensiveness and manageability, prevalent in both sense of coherence (Antonovsky, 1996) and belief in just world theory (Dalbert, 1999), could, therefore, be argued to influence the extent to which proactive coping takes place by allowing the individual to perceive events or stressors in current realities as being predictable and manageable.

3.4.5 SITUATIONAL AND DISPOSITIONAL ATTRIBUTES IN PROACTIVE COPING

Individual differences in proactive coping responses are the result of cognitive, behavioural and dispositional differences (Ouwehand, 2005). Situational factors (e.g. the type of stressor or amount of control over the situation) also influence the use of proactive strategies (Greenglass, Schwarzer, Jakubiec, Fiksenbaum & Taubert, 1999).

Dispositional differences, such as an individual’s future orientation in life (in other words planning one’s future), as well as goal orientation, optimism and self-efficacy have been correlated with proactive coping (Ouwehand et al., 2006). Ouwehand et al. (2008) emphasise the role of goal orientation in proactive coping, for individuals who reflect on their future plans and consequently set both short-term and long-term goals in achieving these plans, will be better equipped to cope proactively with threats to their goals. Similarly, Greenglass et al. (1999) states that individuals who employ proactive coping are autonomous and self-directed in self-regulatory processes governing goal setting and planning, and that these qualities explain why individuals usually strive for ambitious goals and commit to personal quality management.

3.4.6 ADVANTAGES OF PROACTIVE COPING

Sohl and Moyer (2009) found that proactive coping involves a greater amount of self-regulation and awareness, which in turn is correlated with greater wellbeing. Aspinwall and Taylor (1997), as well as Ouwehand et al. (2006) outline the following advantages of proactive coping:

- Chronic stress is controlled because the accumulation of stressors is managed.
- Counterbalancing stressful events in its early stages tend to diffuse the effects of chronic stress.
- Potential stressors are perceived in a positive light which limits distress.
Sufficient coping resources will be available when stressors occur, seeing as how resources are not depleted.

Additional coping options are available when proactive coping strategies are employed seeing as how stressors are confronted before they are fully developed.

The benefits of utilising proactive coping strategies in chronic stress (as in the case of parents of children diagnosed with autism) include the accumulation and availability of resources and the proactive management of accumulated stressors. Aspinwall and Taylor (1997) mentions that proactive coping is challenged in individuals dealing with chronic stress, due to a lack of control and predictability over stressors. In the present study, one could argue that a strong sense of coherence and belief in a just world facilitating perceived comprehensiveness and manageability over chronic stressors, addressing the aforementioned predictability and control concerns. High levels of sense of coherence and proactive coping will furthermore lead parents of children with autism to manage existing resources more effectively. Active engagement and management of goals associated with proactive coping is furthermore argued to be influenced by the meaningfulness component of sense of coherence theory.

Parents of children diagnosed with autism engaged in proactive coping, arguably, experience future threats as challenges and feel motivated to deal with these challenges in order to further personal growth. Dispositional differences in proactive coping responses dictate optimism in outcomes. Belief in a just world influencing outcome expectations, in that the perceived likelihood of attaining meaningful outcomes is high, could possibly explain why some populations of parents are able to set and commit to positive adjustment goals even though they experience chronic stressors.

3.5 CONCEPTUAL FRAMEWORK

Informed by Maree and Van der Westhuizen’s (2009) arguments for the importance of a conceptual framework, I will use my conceptual framework as an explanatory framework throughout my research in order to integrate literature on constructs investigated and to guide the interpretation of research findings in Chapter 6.

Parents of children diagnosed with autism are faced with chronic stressors on a daily basis, influenced by a lack of support and strenuous behavioural symptoms. I referred to literature on chronic stress as well as the experiences of parents of children diagnosed with autism which mentioned that these parents often negate future thoughts in order to concentrate on current stressful realities. Future-oriented thinking, however, is beneficial for wellbeing in that it facilitates goal commitment and goal attainment processes.
The Fantasy Realisation Model (as discussed in the previous chapter), however, indicates how functional tradeoffs are made between thoughts of present realities (chronic stress) and possible futures (regarding self or child) (Oettingen, 1999). Both current realities and future outcomes are mentally contrasted and influenced by perceived goal feasibility and outcome expectations in order to set expectancy-based goal commitments. I have decided to make use of the sense of coherence, belief in a just world and proactive coping constructs to explain and measure processes contained in the Fantasy Realisation Model. Figure 3.1 represents my conceptual framework:

**Figure 3.1:** Conceptual framework
3.5.1 PRESENTING REALITY

Parents of children diagnosed with autism experience chronic stress in current realities due to factors such as practical constraints and insufficient support. Coping literature, however, highlights the importance of perceived control and resource availability in coping with stressors. Goal commitment literature, also, emphasises the importance of perceived feasibility of goal attainment. Goal feasibility is, therefore, described as the perceived ability to manage stressors in current realities in order to ensure future goal attainment.

Sense of coherence, as established by Antonovsky (1996), describes the importance of comprehensiveness (the degree to which the individual perceives the world and stimuli, internal and external to be predictable, ordered and explicable), and manageability (the degree to which an individual believes that he or she has the personal and social resources to handle a demand). These qualities are argued to be similar to qualities expressed in a belief in a just world, where the commitment to a personal contract makes the world seem stable and ordered which in turn is associated with internal resource availability in dealing with stressors. It is therefore proposed that a strong sense of coherence, and belief in a just world, facilitates goal feasibility by making current realities seem comprehensive and manageable.

3.5.2 FUTURE OUTLOOK

It was mentioned that research on the future expectations of parents of a child diagnosed with autism indicates that parents have uncertain future expectations. Coping and goal commitment literature, alike, expresses the importance of outcome expectations in coping with chronic stressors and commitment to goals. Outcome expectations are the perceived likelihood of goals to be reached in the future as well as the perceived meaningfulness of goals in relation to individual preferences.

Individuals with strong just world beliefs believe that the long-term goals they invest in will be duly rewarded if they behave in accordance with reciprocal principles informed by a personal contract. In short, the extent to which an individual believes that the world is just, influences goal setting behaviour in the present because they believe it will be rewarded in the future, thus, mentally comparing (contrasting) the present and the future.

Strong just world beliefs, furthermore, allow individuals to construct a meaningful world in which current realities are predictable and actions taken by individuals contribute to outcome expectations judged worthwhile to self. The meaningfulness component within sense of coherence theory, similarly influenced by comprehensiveness and manageability, involves
the belief that demands and challenges are worthy of commitment which in turn brings about a motivation to actively engage goal attainment behaviour. Both just world beliefs and sense of coherence, therefore, inform meaningful realities which in turn motivate the individual to participate in goal directed behaviour in reaching future outcomes. Commitment as a self-regulatory mechanism regulated by identity constructs is influenced by values and beliefs about what is important. It is, therefore, argued in the present study that outcome expectations, as explained within the Fantasy Realisation Model, are influenced by self-regulatory meaning-making processes, influenced by identity constructs.

3.5.3 MANAGEMENT OF GOALS

In the Fantasy Realisation Model, individuals are more willing to actively engage in problem solving or alleviate stressors in current realities when outcome and feasibility expectations are in place. It is, therefore, argued that perceived control over current realities and worthwhile outcome expectations leads to active goal management.

The energization process is discussed in the Fantasy Realisation model, as a process in which high outcome expectations of goals lead to proactive behaviour to eliminate potential hindrances to goal attainment. The strength of outcome expectations has been argued to be influenced by just world beliefs and the meaningfulness component of sense of coherence. Both strong just world beliefs and the meaningfulness component of sense of coherence theory leads to a motivation in individuals to actively engage in the management of stressors and goals. In just world and sense of coherence theories the individual, furthermore, perceives difficulties as challenges that can be overcome, indicating an upward-regulation of emotions associated with commitment processes, whereas pure coping efforts relate to the down-regulation of emotions.

Whereas previous conceptualisations of coping focused on risk management or the avoidance of stressors as a whole, proactive coping describes future risks in terms of a surmountable challenge which can be overcome by managing goals. Individuals, therefore, who compare future outcomes and current realities actively engage in proactive coping behaviour in current realities (perceived manageable and comprehensive) by managing goals. The content of goals set in current realities are, furthermore, influenced by outcome expectations of the likelihood of attaining meaningful goals influenced by just world beliefs and meaningfulness of sense of coherence.
3.6 CONCLUSION

In this chapter, I provided a literature review of constructs under investigation. These constructs were conceptualised to exist within the Fantasy Realisation Model where the constructs influences outcome expectations and goal feasibility as determinants of goal commitment. A conceptual framework was created to integrate findings in literature and guide interpretations of findings.
4.1 INTRODUCTION

Research in its simplest form is the search for answers to questions (Babbie, 2005). In the present study I explore the relationship between just world beliefs, sense of coherence and proactive coping within the context of chronic stress. It is essential for all researchers to discuss a plan or a blueprint of how they plan to conduct research and this is commonly referred to as a research design (Terre Blanche et al., 2007). A discussion of the research design is necessary since a result in research can only be questioned or understood within the context of how it has been reached (Holfstee, 2009).

In addition, all research designs and procedures are influenced by a researcher’s perspective on reality, which in turn influences epistemological and methodological considerations (Nieuwenhuis, 2007). The purpose of this chapter is, therefore, to describe the phases of inquiry followed in the present study to clarify ontological principles and to strengthen the internal logic of the research procedures and results.

4.2 RESEARCH PARADIGM

Critical realism is considered a post-positivist paradigm and occupies the space between positivism and constructivism (Niewenhuis, 2007). While positivism maintains ontological perspectives of a singular concrete reality and interpretivism of multiple realities, critical realism concerns multiple perceptions about a single, mind-independent reality that is not implicitly known to the researcher. The critical realist aims to gain insight into unobservable causal powers affecting observable behaviour or thoughts in social actors. Objectivity is, therefore, stated as a preferred goal but recognition is given to the limitations thereof in research. Critical realists are, hence, not value-free or value-laden, but cognisant of how values inform perspectives of reality (Denzin & Lincoln, 1994). Social actors or participants are provided with self-agency and knowledge of reality is informed by social interaction, but these processes do not necessarily exclusively inform reality. Thus, mediating realities are thought to influence the perceptions of individuals and researchers (Krauss, 2005; Wuisman, 2005).

The main emphasis in critical realist research endeavours is placed on exploration and explanation, rather than prediction. The notion of truth and evidence paramount in positivist paradigms are, therefore, replaced by the search for evidence that is valid and reliable in
terms of the existing phenomena or knowledge basis (Jefferson & King, 2009; Nieuwenhuis, 2007).

The choice of critical realism is appropriate to this study where I am conducting an exploratory study with regards to possible causal mechanisms (belief in just world, sense of coherence and proactive coping) within context of chronic stress. The acknowledgment of the stratified nature of reality and the emphasis placed on understanding, rather than generalisation, corresponds with the exploratory nature of this research. The major purpose of exploratory research also informing this study is the clarification of ideas, methods and the formulation of questions, informing a later more precise study (Struwig & Stead, 2001), and does not have a prerequisite for generalisation (Babbie, 2005). Being cognisant of the fluid nature of reality and purposefully searching for alternative explanations as professed by critical realism arguably facilitates the best background for exploratory research.

Critical realist researchers recognise the importance of using multi-layered approaches in understanding a stratified reality (Nieuwenhuis, 2007). In abiding to this statement, I have designed a questionnaire which allows for both open-ended questions, facilitating the subjective expression of participants' views, and traditional closed-ended items. I will, therefore, not only research possible relationships between constructs, but also gain insight into subjective experiences of participants.

4.3 CONSTRUCTS UNDER STUDY

Quantitative research generates predefined observational measures through a two-fold deductive process, which includes conceptualisation and operationalisation. Operationalisation requires the researcher to define a construct in abstract terms according to its theoretical meaning, as well as its relation to other variables so that it can be measured (Terre Blanche et al., 2007).

In the present study, I explore the relationships between just world beliefs, sense of coherence and proactive coping within the context of chronic stress. Literature implies that these constructs are associated with future-oriented thinking and goal commitment (Hafer & Begue, 2005; Greenglass, 2002; Antonovsky, 1996). Empirical research, detailing the perceptions and beliefs of parents of children diagnosed with autism, suggest that some uncertainty exists on parents' behalf regarding future expectations (Cullen & Barlow, 2002). This is also supported by empirical research on chronic stress which suggests that individuals tend to selectively focus on current stressful situations whilst negating future thoughts (Segerstrom & Miller, 2004). However, other research suggests positive adjustment and future expectations in parents (King, 2006).
The Fantasy Realisation Model is used as a theoretical framework to understand how positive expectations and beliefs could originate in parents of children diagnosed with autism (Oettingen, 1999). It is argued that mentally contrasting aspirations of an uncertain future (outcome expectations) and present reality (goal feasibility) leads to the management of goals which, in theory, would lead to the establishment of expectancy-based goals.

4.4 AIM OF THE PRESENT STUDY

The aim of the present study is to explore whether there is a statistically significant relationship between just world beliefs, sense of coherence and proactive coping. An additional goal of the research is to explore if demographical variables such as gender, marital status, religious affiliation and social support have an impact on a belief in a just world, sense of coherence and proactive coping in participants.

4.5 RESEARCH QUESTIONS

4.5.1 PRIMARY RESEARCH QUESTION

What is the relationship between sense of coherence, belief in a just world and proactive coping in parents who cope with chronic stressors?

The research question was examined by formulating three sets of hypotheses about the expected relationships between the dependent and independent variables in the study.

4.6 RESEARCH HYPOTHESES

Three sets of hypotheses were formulated.

4.6.1 FIRST SET: INDEPENDENCE OF SAMPLES (T-TESTS)

Hypotheses were formulated to test the independence of subgroups in the sample for gender, marital status, age, and family rituals.

- Null hypothesis : $H_0 : \mu_{1,2} = 0$
  Subgroups analysed in the study will not differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

- Alternative hypothesis : $H_0 : \mu_{1,2} \neq 0$
  Subgroups analysed in the study will differ significantly from each other in terms of just world beliefs, sense of coherence and proactive coping.
4.6.2 **SECOND SET: ANALYSIS OF VARIANCE (ANOVA)**

Hypotheses were formulated to test analysis of variance by the simultaneous comparison of three or more demographical subgroups of each variable.

- **Null hypothesis**: \( \mu_a = \mu_b = \mu_c \)

  Comparisons of the various subgroups on a biographical variable will not differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis**: \( \mu_a \neq \mu_b, \neq \mu_c \)

  Comparisons of the various subgroups on a biographical variable will differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

4.6.3 **THIRD SET: CORRELATIONS (SPEARMAN’S RHO)**

Hypotheses were formulated to test the linear relationship between variables in the study.

- **Null hypothesis**: \( \rho_{xy} = 0 \)

  There is no relationship between just world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis**: \( \rho_{xy} \neq 0 \)

  There are statistically significant relationships between just world beliefs, sense of coherence and proactive coping.

The significance level for all hypotheses is set at 5% \( (p < 0.05) \).

4.7 **RESEARCH DESIGN**

4.7.1 **NON-EXPERIMENTAL CORRELATIONAL DESIGN**

A research design serves the purpose of compiling a comprehensive plan or blue print on how one intends to conduct research (De Vos, *et al.*, 2003). The design, therefore, intends to create a framework for action in order to answer questions by arranging conditions to collect and analyse data in the best way possible in order to promote well-planned research (Babbie, 2005).

This present study utilises an exploratory, non-experimental, cross sectional (passive) research design with a questionnaire as data collection method (Babbie, 2005). In correlational research, the researcher examines relationships between variables that are assumed to be consistent across a large number of cases (Gray, Williamson & Karp 2007;
Correlational designs are appropriate in research with vulnerable populations (as in the present study) which are not amendable to an experimental strategy (Whitley, 2001). Because correlational designs cannot establish causality, the influence of confounding variables is ever present which in turn will influence the internal validity of the present study (Cohen et al., 2007).

4.7.2 DATA COLLECTION

4.7.2.1 Selection criteria

Authors De Vos et al. (2003) and Maree (2007) state the importance of researchers considering the parameters of the population before choosing a sample. Criteria for selecting participants were, therefore, based on:

- Parents of children diagnosed with autism
- Diagnosis has to have been present for two years

Sample size considerations were influenced by the purpose of the study and nature of population investigated (Maree, 2007). The purpose of this study is influenced by its exploratory nature in which preliminary investigations are made into relatively unknown areas of research, which in turn implies a flexible inductive process (Terre Blanche et al., 2006). Access to this comparatively small population proved to be more difficult than initially expected. Since Maree (2007) recommends a minimum of thirty participants in correlational studies, data collection continued until a minimum of 30 complete questionnaires could be analysed.

4.7.2.2 Sampling procedure

After obtaining permission from the Department of Education (Appendix 1), I approached a school specialising in the support of learners diagnosed with autism. The data collection pack (Appendix 3-5), including the letter of informed consent (Appendix 6), was delivered to the deputy principal, who distributed it to parents of all learners via class teachers. Two hundred data collection packs were delivered to the school and only twelve were returned, which represents a response rate of 6%. In accordance with a suggestion by Struwig & Stead (2001), I distributed a follow-up letter to participants, requesting them once again to complete the questionnaire, which resulted in an additional three questionnaires being returned, bringing the total response rate to 7,5%. The low response rate corresponds with literature on the disadvantages of postal or delivered questionnaires (Maree, 2007; Struwig & Stead, 2001). In addition, Cohen et al. (2007) mention difficulty in establishing a high response rate.
in research with sensitive populations due to participants’ concerns about divulging sensitive information.

In addressing a low response rate associated with sensitive research Cohen et al. (2007) recommends advertising research to a wider population. I, therefore, joined various internet forums for parents with children diagnosed with autism and posted advertisements on internet websites to potential participants outlining the purpose of the research. I was consequently invited to a parent support meeting attended by eight parents on 26 March 2010. This corresponds with an additional suggestion made by Cohen et al. (2007) termed outcropping, where researchers locate themselves in a specific location where known members of the target group can be located. This strategy resulted in an additional four questionnaires for analysis resulting in a 50% return rate for this particular group. During the support meeting it was suggested that I distribute questionnaires at an alternative private school also providing care for children diagnosed with autism. I contacted and distributed questionnaires at this school by utilising the key informant whom I met at the parent support meeting in order to build a working relationship with the school (Cohen et al., 2007). Twenty questionnaires were distributed and three were returned, resulting in a 15% response rate.

I was in addition contacted by other international and locally based participants in response to an advertisement that was placed on a webpage on a social network for parents raising a child diagnosed with autism. Fifteen questionnaires were emailed to these participants in a secured version and participants were asked to return the questionnaires in hard copy in order to ensure credibility. Four participants returned questionnaires resulting in a 26% return rate. Some participants sourced other participants as per referral. Data collection took place from February 2010 until May 2010. Table 4.1 below summarises the data sources in the present study.

<table>
<thead>
<tr>
<th>Data source</th>
<th>Questionnaires distributed</th>
<th>Questionnaires returned</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1</td>
<td>200</td>
<td>15</td>
<td>7.5%</td>
</tr>
<tr>
<td>Social support group meeting</td>
<td>8</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>School 2</td>
<td>20</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>Advertisement on social network</td>
<td>12</td>
<td>4</td>
<td>33%</td>
</tr>
<tr>
<td>Referrals by other participants</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>244</td>
<td>30</td>
<td>12%</td>
</tr>
</tbody>
</table>
Response rates in other studies, which utilise parents of children diagnosed with autism as respondents, report response rates of 20% (Siklos & Kerns, 2006), 31% (Olsson & Hwang, 2002) and 51% (Benson & Karlhof). Low response rates can arguably be contributed to the sensitive nature of questioning perhaps inducing some emotional discomfort, and the limited resources (time and support) available to parents due to practical challenges faced by these parents.

4.7.3 INSTRUMENTS

4.7.3.1 Biographical questionnaire

De Vos et al. (2003) suggest a process of developing questionnaire items whereby researchers firstly conceptually define a construct, secondly think of possible attributes of the conceptually defined construct in order to define it operationally and, lastly, write items that correspond with both the conceptual and operational definition. In keeping with the abovementioned processes, I included the following questions in the questionnaire (Appendix 2):

- Basic demographic information (age, location, duration of marriage, religious denomination, age when child was diagnosed, marital status, gender, religious activities and adjustment level of child) (V1-V10).
- Sources of stress and support in coping (V11-V42, V50-V51).
- Coping responses (coping strategies) (V43-V44).
- Family rituals (birthdays, holidays and dinner time) (V45-V49).
- Future aspirations (for both child and self) (V52-V53).
- Goal setting (V54-V55).
- Goal commitment (V56).

I utilised both structured and unstructured items with the majority being open-ended word based items. Cohen et al. (2007) recommend the use of open-ended questions in which the respondents are asked to provide their own answers in smaller samples or in instances where rich and personal information is sought on complex issues. In including the open-ended items, I expected to obtain answers that would convey authentic and in-depth accounts of participants’ experiences in raising a child diagnosed with autism (Maree, 2007).

The restricted use of open-ended questions is, however, argued to place limitations on quantitative statistical analysis and increases the possibility of receiving irrelevant answers from participants (Cohen et al., 2007). Closed-ended questions, where the respondent was asked to select an answer from possible alternatives such as ranking scales, dichotomous questions, and multiple-choice questions were, therefore, included in the questionnaire to
address the aforementioned concerns. Closed-ended questions, furthermore, have potential advantages of simplifying administration and statistical analysis (Babbie, 2005).

Maree and Pietersen (2007) suggest some guidelines in asking sensitive questions. The sensitive nature of items included in the questionnaire necessitated me to be cognisant of question sequencing. I, therefore, structured the questionnaire so that demographic information was sought out initially before sensitive questions were asked later on (Cohen et al., 2007).

A brief piloting process was conducted to ensure the effective development of the questionnaire. Struwig and Stead (2001) recommend that questionnaires be pre-tested by requesting a small sample of respondents to complete the questionnaire in order to determine clarity of questionnaire items, eliminate ambiguous wording as well as to receive feedback on response categories. Babbie (2005) argues that the piloting phase need not necessarily be conducted on a representative sample, but that informed opinions on items be sought to establish external validity. In complying with these suggestions, I requested feedback from a parent of a child with special needs, my supervisor, the deputy principal of the school where research was conducted and a stakeholder in an autism support group. Feedback was documented and the questionnaire was adapted accordingly.

4.7.3.2 Belief in a Just World Scale

The Global Belief in a Just World Scale by Lipkus (1991) was used to measure just world beliefs (Appendix 3). This scale consists of six items that represent a series of statements measuring general attitudes to justice (Wolfrad & Dalbert, 2003). Items are presented on a 7 point Likert scale, with anchoring responses on the extremes (1 - strongly agree, 7- strongly disagree) and possible scores range from 6 to 42. A comparative study (Hellman, Muilenburg-Trevino & Worley, 2008) of three different Belief in Just World scales indicates this particular scale to have the highest internal consistency (Alpha = 0,80).

4.7.3.3 Proactive Coping Inventory

The Proactive Coping Inventory also referred to as the Reactions to Daily Life Questionnaire, was designed by Greenglass (2002), to determine different dimensions of proactive coping (Appendix 4). The measure consists of seven subscales: (i) proactive coping, (ii) preventive coping, (iii) reflective coping, (iv) strategic planning, (v) instrumental support seeking, (vi) emotional support seeking and (vii) avoidance coping. These subscales indicate different proactive skills in coping with distress (Greenglass, 2002).
In this study, I specifically made use of the proactive coping subscale to measure and operationalise proactive coping because it exclusively relates to the proponents of proactive coping. This subscale consists of fourteen items combining autonomous goal setting with self-regulatory goal attainment cognitions and behaviour. This survey typically employs a Likert scale, including four categories with the anchors (1) not at all true and (4) completely true. Possible scores range from 14 to 56 where higher scores are indicative of a higher likelihood of employing proactive coping behaviour. Internal consistency of the proactive subscale has been reported to be high with established Cronbach alphas ranging between 0.71 and 0.81 in Canadian samples (Sohl & Moyer, 2009).

### 4.7.3.4 Orientation to Life Questionnaire

Sense of coherence was measured by the Orientation to Life Questionnaire (Appendix 5), also referred to as the SOC scale (Antonovsky, 1987). In the present study, the shorter 13 item version of the scale was used. Three dimensions of sense of coherence are measured, namely (i) comprehensibility (5 items), (ii) manageability (4 items), and (iii) meaningfulness (4 items). These items are rated on a 7-point semantic differential with two anchoring responses (e.g. never to very often). Possible scores range between 13 and 91 with higher scores indicating a strong sense of coherence. Five of the items are furthermore also negatively stated and reversed in scoring, so that a high score always indicates high sense of coherence levels.

The Orientation to Life Questionnaire has been translated into at least 14 languages and has been used in 32 countries (Lindstrom & Eriksson, 2006). Wissing and Van Eden (2002) state that the instrument is appropriate for South African samples. The internal consistency of the 13 item version scale, ranges from 0.70 to 0.92, which is indicative of desirable internal consistency (Lindstrom & Eriksson, 2005).

### 4.8 DATA ANALYSIS

#### 4.8.1 STATISTICAL ANALYSIS SOFTWARE

Data analysis traditionally is the second last stage of the research process (Terre Blanche et al., 2006). Struwig and Stead (2001) suggest that researchers firstly summarise raw data by coding responses and then enter it into spreadsheet which is lastly analysed by using a statistical analysis program. I made use of SPSS for Windows version 12 (SpSS Inc., 2003) to conduct statistical analysis.
4.8.2 DESCRIPTIVE STATISTICAL ANALYSIS

Descriptive statistics refer to statistical methods that are used to organise and summarise data in a meaningful and visual manner (Maree, 2007). Descriptive statistics do not make any inferences or predictions, but simply report what has been found by describing a sample (Cohen et al., 2007; Whitley, 2001; Babbie, 2005).

Descriptive statistics that were calculated in this study included measures of centrality (means, medians) and variability (standard deviations). Distribution as a summary of the frequency of individual values, or ranges of values for a variable, is described through frequency distribution tables to illustrate percentages of representativeness. Central tendency, as described by the central tendency of a distribution, is measured by calculating the mean, median and mode, and is represented in table format. Dispersion referred to as the spread of values around the central tendency is measured by range and standard deviation, which will allowed me to establish the relation of one variable to another (Whitley, 2001). Single variables that are measured within the biographical section of the questionnaire (age, race and location) represent nominal variables which was described through frequency tables in order to describe or summarise the characteristics of the sample (Maree, 2007).

4.8.3 INFERENTIAL STATISTICS

Inferential statistics are used to make inferences about the specific characteristics of the population and do not necessarily have to be generalised to a greater population especially with regards to smaller samples (Cohen et al., 2007; Whitley, 2001).

The Spearman’s Rho coefficient was used to investigate the relationships between dependent variables. The reliability of the scales in the study was investigated using Cronbach’s alpha and item-analyses. Independent samples T-Tests were used to test significant differences in the scale means of subgroups (gender, age, family rituals and religion), and a one-way analysis of variance (ANOVA) was used to analyse significant differences in scale means of three or more subgroups (demographic location, marital status, involvement in religion, adjustment level of child and age when child was diagnosed). The small sample size \((n = 30)\) precluded more advanced statistical manipulation of the data.

4.8.3.1 Spearman’s Rho

Correlational analysis involves the examination of the relationship between two variables. In the present study, I explored possible relationships between belief in a just world, sense of
coherence and proactive coping. Correlation coefficients are interpreted by the direction and magnitude of the relationship and do not indicate causal relationships between variables. Correlation coefficients can be calculated by utilising either the Spearman’s Rho or Pearson correlational coefficient (Cohen et al., 2007).

The Spearman Rho coefficient differs from the Pearson coefficient in that it makes no assumptions about the distribution between two variables and utilises ranks instead of actual values (Maree & Pietersen, 2007). Whitley (2001) states that the Spearman Rho coefficient is particularly well-suited in research with a sample size below thirty participants, which was the case in the present study. The Spearman Rho coefficient is, furthermore, less sensitive to bias due to outliers, and does not require data to be metrically scaled. Similar to the Pearson coefficient, a correlation of .80 and above is considered as a strong correlation, .50 and around a moderate correlation and .30 and below a weak correlation.

Downie and Heath (1970) state the necessity of examining a scatterplot before correlations are interpreted. A scatterplot is the visual representation of the relationship between variables. In the examination of a scatterplot one should firstly investigate the existence of a linear regression between variables, which means that values on a scattergram should form a straight line. Then one should examine scattergrams for homoscedasticity, which implies that the standard deviation between variables should be equal.

4.8.3.2 Independent samples T-Test

The T-Test is used to examine statistically significant differences between the means of two groups on a single quantitative measure (Maree & Pietersen, 2007). Significance level is determined upon the computation of the T-value by setting an alpha level at .05, which implies a 5% chance that statistically significant differences between means exist by chance. Statistically significant differences in means would imply that all subsequent statistical calculations be done on each independent variable separately (Trochim & Donnelly, 2007).

4.8.3.3 One way analysis of variance (ANOVA)

The T-Test is useful for examining differences between two groups of respondents. Research, however, often requires the comparison of more than two groups (Cohen et al., 2007). The analysis of variance is used when there is more than one independent group that needs to be compared on a single quantitative measure or score. ANOVA makes use of the F-Test to detect significant differences in means between more than two independent groups (Maree & Pietersen, 2007). Estimates of variation in means, due to specified causes (variance between samples) or due to chance (variance within samples), are calculated
separately and compared using a post hoc F-Test in order to draw conclusions about the significant differences in means between groups (Whitley, 2001).

4.8.3.4 Cronbach’s alpha

The coefficient used to measure the internal consistency of an instrument is referred to as the Cronbach alpha. Internal consistency refers to the degree of similarity between items in a measure and gives an indication of the reliability of the scale. Cronbach alpha is, therefore, used to examine the inter-item correlations, as well as item-total correlations. Scales in which items are strongly correlated with one another translates into a high internal consistency and will produce a Cronbach alpha close to zero (Maree & Pietersen, 2007). It is important to note that a high reliability and internal consistency does not necessarily imply that the scale is unidimensional, but that that items measure consistently what they are supposed to measure. Dimensionality should be investigated by a factor analysis, which the small sample size in the present study precluded.

4.9 ANALYSIS OF OPEN-ENDED QUESTIONS

Nieuwenhuis (2007) describes content analysis as a systemic approach to quantitative data analysis, used to identify and summarise message content. In content analysis the researcher codes the data into emerging categories and takes note of what participants noted in each category in order to synthesise the findings (Neuendorf, 2002; Weber, 1990).

The following steps as recommended by Babbie (2005) were taken in analysing open ended questions

- Define recording units: In this study I decided to make use of both words and sentences that would describe future-oriented thinking, goal commitment and support structures.
- Differentiate between latent or manifest content: Manifest content – the visible surface content and deeper latent content, conveying underlying meaning were included in analysis.
- Define categories: Decisions on categories were made by both an inductive and deductive process, where my decisions were influenced by a literature review.
- Coding: A process whereby units of analysis are placed into a descriptive content categories

De Vos et al. (2003) recommend making use of content analysis to interpret and understand word-based items within a questionnaire. Participants were asked to complete several open-
ended items in the questionnaire related to goal setting, support structures and future-oriented thinking. Content analysis enabled me to make sense of these items in relation to other variables.

Some of the advantages of content analysis include its unobtrusive nature and the fact that the verification of results is made possible through the transparency of analysis and permanent nature of texts. Reliability concerns within content analysis include: stability (the extent to which content classification is stable over time), reproducibility (the extent to which different people originate the same codes or categories) and accuracy (the manner in which codes and categories reflect the meaning of the text accurately) (Weber, 1990). In addressing these concerns for reliability, I will construct categories and codes and ask for expert evaluation from my supervisor in evaluating the reliability of categories.

4.10 CONCLUSION

In this chapter I discussed the methodological considerations of the present study. A quantitative approach incorporating a cross-sectional correlational design with non-probability sampling was employed to answer the research question. The following chapter outlines descriptive and inferential statistical results obtained from the sample as well as results from a content analysis of open-ended questions.
CHAPTER 5
Results

5.1 INTRODUCTION

In this chapter I discuss the results obtained from the data collection phase discussed in the previous chapter. Analysis was conducted to test the three sets of hypotheses outlined in Chapter Four. The sample is firstly described by summarising frequencies of responses, as well as creating cross tabulation of results. Inferential statistics used to test hypotheses, include T-Tests and the ANOVA F-Tests to test for variance between independent variables in sample. Correlational tests by means of the Spearman’s Rho coefficient were performed to examine relationships between dependent variables (sense of coherence, proactive coping and belief in just world). Analysis was conducted by using the SPSS program for Windows version 12 (SpSS Inc., 2003). Content analysis was done to analyse qualitative data derived from open-ended questions.

5.2 DESCRIPTIVE ANALYSIS

5.2.1 Age

The age distribution of the sample is presented in Table 5.1. In the sample \((n = 30)\) ages ranged from 30 to 52 and a mean age for participants was calculated as 41.6 \((SD = 5.59)\). The mean age was 40.7 \((SD = 5.82)\) for females and 44 \((SD = 6.83)\) for males.

<table>
<thead>
<tr>
<th>Variable</th>
<th>(n)</th>
<th>(\overline{x})</th>
<th>(s)</th>
<th>(s^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>30</td>
<td>41.6</td>
<td>5.59</td>
<td>38.38</td>
</tr>
</tbody>
</table>

5.2.2 Gender

Of the 30 participants, 26 (86.7 %) were female and 4 (13.3 %) male. The majority of the participants were, therefore, the mothers of children with autism as indicated in Table 5.2.

<table>
<thead>
<tr>
<th>Gender</th>
<th>(n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
<td>86.7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>
5.2.3 GEOGRAPHICAL REGION

The majority of participants were located in Gauteng \( (n = 22) \) and North West \( (n = 6) \) with two participants living overseas (UK and USA).

<table>
<thead>
<tr>
<th>Geographic region</th>
<th>( n )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauteng</td>
<td>22</td>
<td>73.3</td>
</tr>
<tr>
<td>North West</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>International</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

5.2.4 MARITAL STATUS AND DURATION

<table>
<thead>
<tr>
<th>Marital status</th>
<th>( n )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>24</td>
<td>80.0</td>
</tr>
<tr>
<td>Single</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Widow/ Widower</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Twenty four participants are married and six participants are single parents, including divorcees \( (n = 4) \), never married \( (n = 1) \) and widow \( (n = 1) \) categories. The mean duration reported for marriage is 16.62 years \( (SD = 5.762) \).

5.2.5 RELIGIOUS INVOLVEMENT

Participants described their involvement in religious activities as very involved \( (n = 9) \), moderately involved \( (n = 12) \) and as not involved \( (n = 9) \).

<table>
<thead>
<tr>
<th>Involvement in religion</th>
<th>( n )</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very involved</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>Moderately involved</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Not involved</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>
5.2.6 AGE AND ADJUSTMENT LEVEL OF CHILD WITH AUTISM

Ages of diagnosed children ranged between 2 and 20 years and the mean age of children diagnosed with autism was 10.82 years ($SD = 4.37$ years). Parents described their children either as mildly impaired ($n = 6$), moderately impaired ($n = 19$) or severely impaired ($n = 5$). The mean age for the age at which the child was diagnosed is 4.2 years ($SD = 2.06$ years). From table 5.6 one is able to deduce that the moderately impaired category was fairly distributed amongst all age categories, whilst most of the mild and severe cases were present in children from the younger age categories. There are no significant differences between age categories and adjustment level of children ($\chi^2 (4) = 2.47$, $p = .65$).

**TABLE 5.6: Cross tabulation of diagnosed child’s age and severity of diagnosis**

<table>
<thead>
<tr>
<th>Age category of child</th>
<th>Adjustment level child</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mildly impaired</td>
<td>moderately impaired</td>
</tr>
<tr>
<td>2-8</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>9-11</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>12-20</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>19</td>
</tr>
</tbody>
</table>

5.2.7 SOURCES OF SUPPORT

Participants ranked their family, friends and teachers as most important sources of support. Support groups, religious groups and the medical profession were ranked as least important. These results correspond with how participants ranked the frequencies of others in acting as sources of emotional, practical (day-to-day care giving) and informational support is illustrated in table 5.7.

From Table 5.7 several observations can be made. Firstly, information support from teachers and emotional support from life partners was utilised the most by participants. Secondly, participants reported that they utilised support groups and religious groups for support rarely. Families of participants are reported as rarely providing support in terms of emotional and practical support and support groups and religious groups were reported as hardly ever providing emotional, practical or information support.
TABLE 5.7   Sources of emotional, practical and information support with mean (X) and standard deviations (SD)

<table>
<thead>
<tr>
<th>Source of support</th>
<th>Min</th>
<th>Max</th>
<th>Emotional support (X)</th>
<th>Practical support (X)</th>
<th>Information support (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life partner</td>
<td>1</td>
<td>4</td>
<td>3.30 (SD = 1.20)</td>
<td>2.83 (SD = 1.17)</td>
<td>1.93 (SD = 1.11)</td>
</tr>
<tr>
<td>Family</td>
<td>1</td>
<td>4</td>
<td>2.66 (SD = .95)</td>
<td>2.36 (SD = 0.96)</td>
<td>1.73 (SD = 0.90)</td>
</tr>
<tr>
<td>Support groups</td>
<td>1</td>
<td>4</td>
<td>1.43 (SD = .62)</td>
<td>1.33 (SD = 0.61)</td>
<td>1.86 (SD = 1.07)</td>
</tr>
<tr>
<td>Religious groups</td>
<td>1</td>
<td>4</td>
<td>1.93 (SD = .90)</td>
<td>1.36 (SD = 0.66)</td>
<td>1.30 (SD = 0.65)</td>
</tr>
<tr>
<td>Teachers</td>
<td>1</td>
<td>4</td>
<td>2.70 (SD = 1.02)</td>
<td>2.80 (SD = 0.68)</td>
<td>3.30 (SD = 0.79)</td>
</tr>
</tbody>
</table>

5.2.8 SOURCES OF STRESS

Respondents were, furthermore, asked to report on sources of stress. Mean scores of participants indicate life partners and families as rarely acting as sources of stress whereas support groups, religious groups and teachers were ranked as hardly ever inducing stress in participants as illustrated in Table 5.8

TABLE 5.8: Sources of stress with mean scores (X) and standard deviations (SD)

<table>
<thead>
<tr>
<th>Source of stress</th>
<th>Min</th>
<th>Max</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life partner</td>
<td>1</td>
<td>4</td>
<td>2.20</td>
<td>.96</td>
</tr>
<tr>
<td>Family</td>
<td>1</td>
<td>4</td>
<td>2.03</td>
<td>.68</td>
</tr>
<tr>
<td>Support groups</td>
<td>1</td>
<td>4</td>
<td>1.10</td>
<td>.30</td>
</tr>
<tr>
<td>Religious groups</td>
<td>1</td>
<td>4</td>
<td>.11</td>
<td>.61</td>
</tr>
<tr>
<td>Teachers</td>
<td>1</td>
<td>4</td>
<td>.17</td>
<td>.95</td>
</tr>
</tbody>
</table>

5.2.9 FAMILY RITUALS

Family rituals, measuring families’ willingness to engage in activities taking place on birthdays, religious holidays and dinnertime were also measured. Table 5.9 illustrates an almost equal distribution in participants and their families in maintaining religious and dinnertime rituals. Participants generally reported birthday rituals more often than not.
TABLE 5.9: Frequencies (f) and percentages (%) of families who have specific family rituals (n = 30)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Birthday rituals</td>
<td>23</td>
<td>76.7</td>
</tr>
<tr>
<td>Religious rituals</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Dinnertime rituals</td>
<td>15</td>
<td>50</td>
</tr>
</tbody>
</table>

5.2.10 FUTURE GOALS

When participants were asked if they have set goals in reaching future expectations for themselves and their children, the majority stated that they have indeed set goals (n = 21). Eight participants (n = 8) noted that they had not set goals and one participant (n = 1) chose both yes and no options in setting goals. The content of these goals is discussed in the content analysis section (Section 5.5.8, p 78)

5.3 DESCRIPTIVE STATISTICS FOR SCALES

5.3.1 ORIENTATION TO LIFE QUESTIONNAIRE

The 13 item version Orientation to Life Questionnaire (Antonovsky, 1987) was utilised to operationalise sense of coherence as a construct. Sense of coherence was analysed according to its unidimensional and multidimensional characteristics in order to analyse the reliability of the subscales and total scales.

5.3.1.1 Distributional properties of the Orientation to Life Questionnaire (SOC)

The descriptive statistics for the SOC full scale are presented in Table 5.10:

TABLE 5.10: Descriptive statistics for the SOC full scale including mean (\(\bar{x}\)), variance (s\(^2\)), median (Md), Mode (Mo) and standard deviation (SD)

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Md</th>
<th>Mo</th>
<th>SD</th>
<th>s(^2)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>30</td>
<td>4.41</td>
<td>4.38</td>
<td>5.00</td>
<td>.955</td>
<td>.91</td>
<td>3.00</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The distribution of scores is indicative of a distribution that is positively skewed (g\(_1\) = .203) with the mode (5.00) on the right hand side of the mean and the median (4.38) to the left of the mean. The distribution is, furthermore, considered to be platykurtic (-1.01) which is
indicative of a lower probability than in a normally distributed sample to have values near the mean (DeCarlo, 1997). Small sample size could have influenced the distribution of results by influencing skewness and kurtosis.

Table 5.11 reports a summary of item statistics on the three subscales (comprehensiveness, manageability and meaningfulness). All items display a statistical mean between 4.1 and 4.8. When taking subscale scores into consideration participants reported lower levels in the manageability subscale and higher levels on the comprehensiveness and meaningfulness subscales.

**Table 5.11: Summary of SOC subscales: comprehensiveness, manageability and meaningfulness**

<table>
<thead>
<tr>
<th>N of items</th>
<th>Comprehensiveness</th>
<th>Manageability</th>
<th>Meaningfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>20.53</td>
<td>16.33</td>
<td>20.81</td>
</tr>
<tr>
<td>Statistical Mean</td>
<td>4.10</td>
<td>4.08</td>
<td>4.80</td>
</tr>
<tr>
<td>Minimum statistic</td>
<td>3.06</td>
<td>2.50</td>
<td>2.75</td>
</tr>
<tr>
<td>Maximum statistic</td>
<td>4.833</td>
<td>6.75</td>
<td>7.00</td>
</tr>
<tr>
<td>Range statistic</td>
<td>4.25</td>
<td>4.25</td>
<td>4.25</td>
</tr>
<tr>
<td>(SD) statistic</td>
<td>1.040</td>
<td>1.05</td>
<td>1.19</td>
</tr>
<tr>
<td>Variance statistic</td>
<td>.503</td>
<td>1.11</td>
<td>1.42</td>
</tr>
<tr>
<td>Skewness statistic</td>
<td>.545</td>
<td>.703</td>
<td>-.343</td>
</tr>
<tr>
<td>Kurtosis statistic</td>
<td>-.713</td>
<td>.166</td>
<td>-.793</td>
</tr>
</tbody>
</table>

**5.3.1.2 Scale reliability of the Orientation to Life Questionnaire**

The Cronbach’s Alpha for the total scale was .824, which is considered acceptable. The alpha coefficient for the sub scales was lower .517 (Comprehensibility), .589 (Manageability) and .693 (Meaningfulness) respectively, and analyses based on the subscale scores should, therefore, be interpreted with caution.

**5.3.2 Reactions to Daily Life Questionnaire**

The Reactions to Daily Life Questionnaire also known as the Proactive Inventory was utilised to measure proactive coping (Greenglass, 2002). The subscale containing 13 questions pertaining to proactive coping was specifically used in this study. Possible total scores range from 14 to 56 where higher scores are indicative of a higher likelihood of employing proactive coping behaviour. Items 2, 9 and 4 were reverse coded before calculating scale totals.
5.3.2.1 Distributional properties of the Reaction to Daily Life Questionnaire

The descriptive statistics for the Reactions to Daily Life Questionnaire are presented in Table 5.12

**TABLE 5.12: Descriptive statistics for the Reactions to Daily Life Questionnaire**

<table>
<thead>
<tr>
<th>Valid</th>
<th>Missing</th>
<th>( \bar{x} )</th>
<th>( Md )</th>
<th>( Mo )</th>
<th>( SD )</th>
<th>( s^2 )</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>0</td>
<td>3.20</td>
<td>3.28</td>
<td>3.50</td>
<td>.42</td>
<td>.18</td>
<td>2.29</td>
<td>4.00</td>
</tr>
</tbody>
</table>

The mean reached in the questionnaire was calculated as 3.20 with a standard deviation of .48. This mean is considered to reflect a high to moderate capacity to engage in proactive coping by participants.

The distribution of scores in the questionnaire indicates a slightly negatively skewed distribution \( (g_1 = - .32) \), with both the median (3.28) and mode (3.50) on the right hand side of the mean. The negatively skewed distribution in this scale is indicative of a slightly higher frequency of high end scores reported by participants. The distribution is, furthermore, considered to be platykurtic (-4.81) relating to high distributions of scores located around the mean. Once again, a small sample size could have influenced the distribution of reported results.

5.3.2.2 Scale reliability of the Reactions to Daily Life Questionnaire

The calculated Cronbach Alpha of the Reactions to Daily Life Questionnaire was regarded as acceptable \( (r = .811) \), which is indicative of its reliability and internal consistency as being high (Cohen et al., 2007).

5.3.3 GLOBAL BELIEF IN JUST WORLD SCALE

5.3.3.1 Distributional properties of the Global Belief in a Just World Scale

The descriptive statistics of the Global Belief in a Just World scale are reported in table 5.13
TABLE 5.13: Descriptive statistics for the Global Belief in Just World Scale including mean (\(\bar{x}\)), variance (\(s^2\)), median (\(Md\)), Mode (\(Mo\)) and standard deviation (\(SD\))

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>(\bar{x})</th>
<th>Md</th>
<th>Mo</th>
<th>SD</th>
<th>(s^2)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>30</td>
<td>3.59</td>
<td>3.41</td>
<td>2.67</td>
<td>1.32</td>
<td>1.75</td>
<td>1.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean calculated for responses in the questionnaire reported by participants were 3.59 (\(SD = 1.32\)). The total mean, as well as the statistical mean in 5.13, is indicative of a presence of low to moderate global belief in just world in participants.

The distribution of scores in the questionnaire indicates positive skewness (\(g_1 = .536\)) with both the median (3.41) and mode (2.67) on the left hand side of the mean. The positively skewed results illustrate lower end responses on items also noticeable in the mean scores. The kurtosis of the distribution is, furthermore, considered platykurtic (.66).

5.3.3.2 Scale reliability of the Global Belief in Just World Scale

The Cronbach alpha of reliability calculated for the scale was .83, which is highly reliable and reflects internal consistency between item responses and is, therefore, acceptable.

5.4 INFERENTIAL STATISTICS

5.4.1 FIRST SET HYPOTHESES: INDEPENDENCE OF SAMPLES (T-TESTS)

Hypotheses were formulated to test the independence of subgroups in the sample for gender, marital status, age, family rituals, and future goals on the scale means. The following null and alternative hypotheses were investigated:

- **Null hypothesis :** \(H_0 : \mu_{1,2} = 0\)
  Subgroups (gender, age, family rituals and demographical religion) analysed in the study will not differ significantly in terms of just-world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis :** \(H_0 : \mu_{1,2} \neq 0\)
  Subgroups (gender, age, family rituals and demographical religion) analysed in the study will differ significantly from each other in terms of just world beliefs, sense of coherence and proactive coping.
Significance level was set at \( p = 0.05 \) for all statistical tests that were performed. No significant differences were reported for any of the subgroup analyses (Appendix 7). The null hypothesis could, therefore, be accepted for all independent variables. A cautionary note should, however, be made in that the small sample size could have influenced these results (Maree & Pietersen, 2007).

5.4.2 SECOND SET OF HYPOTHESES: ANALYSIS OF VARIANCE (ANOVA)

Hypotheses were formulated to test analysis of variance by the simultaneous comparison of three or more demographical subgroups of each variable.

- **Null hypothesis**: \( \mu_a = \mu_b = \mu_c \)

Comparisons of the various subgroups (sources of support demographic location, marital status, involvement in religion, adjustment level of child and age when child was diagnosed) on a biographical variable will not differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis**: \( \mu_a \neq \mu_b, \neq \mu_c \)

Comparisons of the various subgroups on a biographical variable (sources of support demographic location, marital status, involvement in religion, adjustment level of child and age when child was diagnosed) will differ significantly in terms of just world beliefs, sense of coherence and proactive coping.

These hypotheses were investigated by calculating the analysis of variance (ANOVA). The Scheffé post hoc test was utilised to indicate in which groups the significant difference was present. Significance level was set at \( p = 0.05 \) for all statistical tests that were performed. No statistically significant differences were reported for any of the subgroup analyses (Appendix 8). The null hypothesis could, therefore, be accepted for all independent variables. Once again, one should mention that the small sample size could have influenced these results (Maree & Pietersen, 2007).

From the abovementioned analysis the alternative hypothesis was, therefore, rejected and the null hypotheses accepted, meaning that investigated subgroups do not differ significantly from one another in terms of belief in just world, sense of coherence and proactive coping.

5.4.3 THIRD SET OF HYPOTHESES: CORRELATIONS (SPEARMAN RHO)

Hypotheses were formulated to test the linear relationship between variables in the study.
- **Null hypothesis :** $\rho_{xy} = 0$

There is no relationship between just world beliefs, sense of coherence and proactive coping.

- **Alternative hypothesis :** $\rho_{xy} \neq 0$

There are statistically significant relationships between just world beliefs, sense of coherence and proactive coping.

A correlational analysis was conducted to investigate the third set of hypotheses relating to the linear relationships between sense of coherence, belief in just world and proactive coping. Both the Pearson correlation coefficient ($r$) and the Spearman rank order correlation coefficient ($\rho$) were calculated to explore possible correlations between constructs. The Pearson coefficient (parametric method in data analysis) and the Spearman correlation (a non-parametric method) provided similar results of correlations between variables, but the Spearman coefficient provided additional correlations that were not present in the Pearson coefficient correlation analysis. The Spearman coefficient differs from the Pearson coefficient in that it makes no assumptions about the distribution between two variables and it utilises ranks instead of the actual values (Maree & Pietersen, 2007). Whitley (2001) states that the Spearman coefficient is particularly well-suited in research where sample size is less than thirty.

Table 5.14 displays the Spearman Rho correlations between belief in just world, proactive coping, sense of coherence full scale, sense of coherence (comprehensiveness), sense of coherence (manageability) and sense of coherence (meaningfulness) totals.

**TABLE 5.14: Spearman’s rho correlations**

<table>
<thead>
<tr>
<th></th>
<th>PC</th>
<th>SOC</th>
<th>SOC Comp</th>
<th>SOC Meaning</th>
<th>SOC Manage</th>
<th>BJW</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>1.0</td>
<td>.40*</td>
<td>.20</td>
<td>.48**</td>
<td>.33</td>
<td>.51**</td>
</tr>
<tr>
<td>SOC</td>
<td></td>
<td>1.0</td>
<td>.87**</td>
<td>.84**</td>
<td>.88**</td>
<td>.23</td>
</tr>
<tr>
<td>SOCComp</td>
<td></td>
<td>1.0</td>
<td></td>
<td>.57**</td>
<td>.78**</td>
<td>.15</td>
</tr>
<tr>
<td>SOCMeaning</td>
<td></td>
<td>1.0</td>
<td></td>
<td></td>
<td>.626**</td>
<td>.20</td>
</tr>
<tr>
<td>SOCManage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.22</td>
</tr>
<tr>
<td>BJW</td>
<td></td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
The following significant correlations were found:

- There was a strong significant positive correlation between the sense of coherence total scale and subscales comprehension \( r(28) = .87, p < .01 \), meaning, \( r(28) = .84, p < .01 \) and manageability, \( r(28) = .88, p < .01 \).
- There was a moderately significant positive correlation between belief in just world and proactive coping \( r(28) = .516, p < .01 \).
- A moderately positive relationship between the sense of coherence meaningfulness subscale and proactive coping that was significant \( r(28) = .48, p < .01 \).
- A moderately significant positive relationship between the total sense of coherence scale and proactive coping \( r(28) = .407, p < .05 \).
- No significant relationship between belief in just world and sense of coherence.

From data collected in this sample, the alternative hypotheses for relationships between sense of coherence and proactive coping and belief in just world can be accepted and the null hypothesis rejected. The alternative hypothesis is rejected and the null hypothesis therefore accepted for the relationship between belief in just world and sense of coherence.

### 5.4.4 PARTIAL CORRELATIONS

A partial correlation between belief in just world and proactive coping, whilst controlling for sense of coherence (meaningfulness) was conducted to gain insight into the possible influence of sense of coherence (meaningfulness) on the correlation between belief in just world and proactive coping. Table 5.15 displays the results of a partial correlation between belief in just world and proactive coping whilst controlling for sense of coherence (meaningfulness).

**Table 5.15: Partial correlations belief in just world and proactive coping, controlling for sense of coherence (meaningfulness)**

<table>
<thead>
<tr>
<th>Control Variable</th>
<th>PCTot</th>
<th>BJWtot</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC Meaning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCTot Correlation</td>
<td>1.00</td>
<td>.44</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>.01</td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>BJWtot Correlation</td>
<td>.44</td>
<td>1.00</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.01</td>
<td>.</td>
</tr>
<tr>
<td>Df</td>
<td>27</td>
<td>0</td>
</tr>
</tbody>
</table>

Belief in just world remained significantly correlated with proactive coping despite controlling for the effect of meaningfulness \( r(28) = .516, p = .01 \). In addition, the meaning subscale of
sense of coherence correlated with proactive coping \( r (28) = .48, p < .01 \). The results indicated that sense of coherence (meaningfulness) moderates the relationship between belief in just world and proactive coping \( r (28) = .44, p < .01 \).

5.5 ANALYSIS OF QUALITATIVE DATA

Open-ended questions (variable 35, 43-45 and 50-56) were analysed by means of content analysis to identify themes and investigate their frequency. Nieuwenhuis (2007) states that content analysis is a systemic approach to quantitative data analysis that identifies and summarises message content. In conducting content analysis, I coded the data into emerging categories and searched for instances where the data mentions these categories. The next step was to take note of what participants noted in each category and lastly to synthesise the findings (Neuendorf, 2002; Weber, 1990). In the present chapter I describe and report frequencies of prevalent themes. It should be noted that frequency of responses are reported in this section and not the frequency of participants who mentioned a theme. The synthesis of themes and its contribution to the furthered understanding of quantitative data will be described in Chapter Six.

5.5.1 ADDITIONAL SUPPORTIVE NEEDS OF PARTICIPANTS

Participants were asked to rate the importance of various sources of support in terms of emotional, practical and information support and was thereafter asked to mention where they need additional support. Twenty eight participants completed the open-ended question and categories formulated include: respite care, practical support, emotional support, social understanding and information.

Participants noted five times \( (f = 5) \) that respite care “Respite care for a day or weekend” is an additional supportive need. Within this context respite care refers to facilities in which the diagnosed child receives care for a short duration of time. Practical support \( (f = 6) \) “Praktiese ondersteuning van ander” related to day to day care giving was also mentioned as was emotional support \( (f = 5) \) “Emotionally how to cope with an autistic child” related to emotional support in coping with stressors related to an autism diagnosis”. Other categories of responses include social understanding \( (f = 3) \) “Community understanding of child” related to understanding from others and information \( (f = 3) \) how to manage a diagnosis, “The right diagnoses of children and guidelines to go forward with problem solving”

A trend was observed where participants who noted that they need additional practical support and respite care typically scored lower on both the sense of coherence
(manageability) scale and the proactive scale, although this trend could not be analysed statistically.

5.5.2 COPING STRATEGIES USED BY PARENTS

Participants were asked to describe how they cope with these stressors. Twenty eight participants completed the question.

Most frequent categorical responses include *social activities* \((f = 5)\) “I share with my colleagues or friends” in which participants communicate with others about stressors, *physical activities* \((f = 5)\) “I engage in sports interests, walk or run at the dam” where participants stay active and *planning* beforehand \((f = 4)\) “I plan every day and situation carefully”. Categorical responses on coping responses mentioned less frequently include *avoidance* of social situations \((f = 3)\) “I avoid contact with other people because of child”, *religious activities* \((f = 3)\) “I pray and hope that my son will be better” and using *medication* \((f = 2)\) to alleviate stress “I am on medication to cope”

An observable trend in responses suggests that parents employing religion as a coping mechanism appeared to frequently score higher on the sense of coherence (meaningfulness) subscale as well as the belief in just world scale, although this trend could not be analysed statistically.

5.5.3 PRECAUTIONARY MEASURES IN PREVENTING FUTURE STRESSORS

A follow-up, a question was formulated in which participants were asked to report on the precautionary measures they take in order to prevent future stressors. This question was asked in order to gain further insight into proactive coping behaviour employed by participants. Twenty-seven participants who completed the question mentioned the following categorical responses with regards to proactive behaviour:

*Planning* \((f = 12)\) for a social occasion or other day to day activities beforehand “I plan every occasion or social interaction”, *avoidance* \((f = 6)\) of social situations “I avoid other people because of my child”, *limiting other stressors* \((f = 3)\) “I try not to over commit my time” and *nothing* \((f = 3)\) not maintaining any precautionary measures “Nothing – I handle stressors as they arise”. The planning category, as well as the minimisation of other stressors seems to suggest proactive coping behaviour in parents where these parents seemed to obtain higher scores on the Reactions to Daily Life Questionnaire.
5.5.4 **DAILY CHALLENGES FACED BY PARENTS**

Participants were asked to comment on the challenges that they face on a daily basis, which was conceptualised to influence sense of coherence belief in just world and proactive coping. Twenty-nine participants reported the following categorical responses:

The most frequently mentioned challenge related to *practical* day to day challenges \((f = 13)\) “Getting him to school and back – 50km each way, preparing meals, he is a difficult eater” and the child’s behaviour or coping with *behavioural symptoms* \((f = 7)\) “Screaming nonstop, throwing and breaking things, self-injury behaviour, extreme hyper activeness”. Participants less frequently mentioned daily challenges with regards to *acceptance from others* for the child’s behaviour \((f = 5)\) “I find it hard to explain to others why my child is or behaves in a certain manner” and *thinking about the future* \((f = 4)\) “I am constantly concerned about the future of my child”.

A trend can be observed in parents who find it difficult to think about the future and low sense of coherence (comprehensiveness) and belief in just world scores. In addition, a trend can also be observed between difficult behavioural symptoms and low sense of coherence (manageability) scores. Parents reporting practical challenges, furthermore, were also more likely to report less support from family members.

5.5.5 **LESSONS LEARNT IN RAISING AN AUTISTIC CHILD**

Participants were asked to comment on the lessons they have learnt in raising a child diagnosed with autism, perhaps, relating to the meaningfulness subscale in sense of coherence, as well as learnt coping strategies in coping with stressors. All thirty participants completed the question.

The most frequently mentioned lesson learnt by parents was categorised as *patience* with self and child’s behaviour \((f = 14)\) “Patience - walking a road to which there is no end in sight” and *other people’s acceptance of child* \((f = 4)\) “People are intolerant of everything different”. Other lessons learnt include *turning towards religion* \((f = 5)\) or dependence on a higher being “My total inability to handle situations and total dependence on God” and *acceptance of the diagnosis* or symptoms \((f = 4)\) “You must adjust your expectations and accept the new normal”.

An observation can be made that participants who reported that they turn towards religion also seemed to score on the high end of sense of coherence (meaningfulness) subscale. These respondents, however, reported mixed responses in receiving support from religious
groups. Parents reporting patience as a lesson learnt, frequently scored higher on the Reactions to Daily Life Questionnaire.

### 5.5.6 Future Expectations for the Child

The open question regarding future expectations for the child was added to gain insight into the extent to which parents engage in future-oriented thinking as well as the content of future expectations. All thirty participants completed the question.

Participants most frequently mentioned that they have positive future expectations for their children. These expectations included that the child will become a *functional adult* and eventually fit into societal norms ($f = 13$) “I hope that my child will be better functioning and fit in normally in the world”, that the child will be *happy in future environments* ($f = 5$) “To be as happy and fulfilled as possible”. Less frequently participants mentioned future expectations such as foreseeing the diagnosed child eventually *living in a group home* ($f = 4$) “Residential facility for the mentally impaired” or *no future expectations* ($f = 4$) “We don’t plan for the future with him, you don’t know what will happen tomorrow”.

### 5.5.7 Future Expectations That Parents Have for Themselves

In a follow-up question, participants were asked to describe future expectations they have for themselves. All thirty participants answered the question.

Participants most frequently mentioned future expectations involving the *support of their child in the future* ($f = 12$) “I will feel responsible for my child until the day I die”, reaching *success in other spheres* of life such as careers or families ($f = 6$) “To enjoy a career again or to write a book”, living with a *lesser amount of stress* ($f = 5$) “That I can one day have no stress and be a normal parent”. Participants less frequently mentioned that they hope to *help other parents* or the community ($f = 3$) “To fight for disability rights, to get more schools and aftercare for adults”. *Not having any future expectations* was mentioned four times ($f = 4$) “It is something I don’t think about often”.

It would seem as if that parents who do not have future expectations for themselves or their children frequently score lower on the Global Belief in Just World Scale.
5.5.8 GOALS OF PARENTS

After answering questions on future expectations participants were asked to mention if they have set goals in reaching these outcomes (section 5.2.1.9). Twenty one participants then described their goals.

Participants mentioned goals related to the improvement of the child \((f = 8)\) “To help him read and write and become more self sufficient”, maintaining existing measures \((f = 5)\) “to keep therapy and learning” and searching for aftercare facilities where the child can live later on \((f = 3)\) “We are looking for somewhere for our child to live when she leaves home”. Some parents mentioned that they were uncertain about the content or type of goals \((f = 5)\) “With a very uncertain future and a challenging daily situation it is difficult to set goals”

In a follow up question in which participants were asked to comment on their commitment to the goals the majority reported that they feel that they are highly committed \((n = 14)\) and the minority described commitment, whilst acknowledged effort in staying committed \((n = 4)\). Only eighteen participants completed the question.

5.6 CONCLUSION

In this chapter the results obtained from data collection procedures were discussed. Descriptive statistics was conducted and found that the sample mainly consisted of married mothers of autistic children who are moderately impaired, located in the Gauteng area with a mean age of 41.6. All scales had high internal consistency with the exception of the subscales of the sense of coherence scale. Inferential statistics including the independent T-Test and analysis of variance (ANOVA) found no statistical difference in means between independent variables (e.g. age) and dependent variables (sense of coherence, belief in just world and proactive coping). Spearman Rho correlations between constructs indicated a correlations between most constructs with the exception of between belief in just world and sense of coherence. A partial correlation indicated that sense of coherence (meaningfulness) has a moderating effect on the correlation between belief in just world and proactive coping.

The analysis of open-ended questions illustrated that parents face daily challenges and need more support in aspects related to practical day to day situations, societal understanding of the child’s behaviour, managing the child’s behavioural symptoms and receiving more emotional support from significant others. Parents cope with stressors with relation to the diagnosis by planning every day and situation carefully, engaging in psychical and social activities and in some cases avoiding difficult social situations. Although some reported that they find it difficult to think about the future, the majority was able to mention future
expectations for themselves and their children as well as goals related to the achievement of future expectations. Future aspirations for the child and goals set in reaching future outcomes related to the improvement of the child in order to become a functional and happy adult and the maintenance of current strategies in order to reach these goals. Although it could not be statistically supported, planning behaviour typically resulted in higher proactive coping results and higher sense of coherence (manageability) levels. Difficulty in thinking about the future related to low sense of coherence (comprehensiveness) and belief in just world levels and utilising religion as a coping mechanism related higher to sense of coherence (meaningfulness).
CHAPTER 6
Interpretation of results and conclusions

6.1 INTRODUCTION

In this chapter I will present an interpretation of results outlined in Chapter Five. The interpretation of results will be informed by existing literature and the conceptual framework outlined in Chapter Three, in an attempt to answer the research question. The contribution of results, limitations in the study and recommendations for future research will be discussed last.

6.2 SUMMARY

6.2.1 RESEARCH PROCESS

Literature indicates that parents of autistic children experience chronic stress (Benson & Karlof, 2009). Literature related to chronic stress (Segerstrom & Miller, 2004; Holman & Silver, 2005) and parental difficulty in raising an autistic child (Cullen & Barlow, 2002) mentions difficulty in thinking about the future. However, research done by King (2006), found positive adaptation and other research mentions that parents of children diagnosed with autism often utilise proactive coping strategies (Benson, 2010; Altiere & Von Kluge, 2009). Situations are perceived as stressful, as a consequence of both situational and dispositional characteristics (Ouwehand et al., 2006). The aim of the present study was, therefore, to explore the influence of dispositional characteristics such as belief in just world and sense of coherence on proactive coping in evaluation of stress. The following research question was asked: What is the relationship between sense of coherence, belief in a just world and proactive coping in parents who cope with chronic stressors?

The Fantasy Realisation Model (Oettingen, Mayer, Thorpe, Janetzke & Lorenz, 2005), indicating how current realities and future outcomes are both related in the establishment of expectancy-based goal commitment, was used as a theoretical framework to conceptualise constructs and interpret findings.

A quantitative research approach, including a cross-sectional correlational design and survey method as data collection method, was utilised. The sample \( n = 30 \) consisted of parents of children sourced from schools specialising in learners diagnosed with autism, support groups and internet advertisements. Constructs researched were operationalised through the Global Belief in Just World scale (Lipkus, 1991), Orientation to Life Questionnaire (Antonovsky,
The hypotheses formulated in the study included:

- Hypotheses which were formulated to test the independence of subgroups in the sample for gender, age, family rituals and religion (Independent T-Test).
- Hypotheses which were formulated to analyse variance in comparing of three or more subgroups including: demographic location, marital status, involvement in religion, adjustment level of child and age when child was diagnosed (Analysis of variance, ANOVA).
- Hypotheses which were formulated to test the linear relationship between variables in the study (Spearman’s Rho).

SPSS for Windows version 12 (SpSS Inc., 2003) was used for statistical computations. Descriptive statistics that were calculated in this study included measures of centrality (means, medians) and variability (standard deviations). Inferential statistics included a correlational analysis to investigate relationships between constructs and independent-samples T-Tests were used to compare the scale means of subgroups in the study, and a one-way analysis of variance (ANOVA) was used to analyse significant differences in the scale means of three or more subgroups. The small sample size precluded more advanced statistical manipulation of the data. Qualitative responses in the biographical questionnaire were analysed by means of a content analysis.

6.2.2 MAIN FINDINGS

6.2.2.1 Quantitative results

Descriptive results of the sample \( (n = 30) \) suggested that the sample mainly consisted of mothers of children diagnosed with autism \( (n = 26) \), who reside in Gauteng with ages ranging between 30 and 52 \( (\bar{x} = 41.6) \). The majority of participants stated that they are married \( (n = 24) \) and six participants were single parents. The mean age of diagnosed children were 10.82 years and parents described their children as mildly impaired \( (n = 6) \), moderately impaired \( (n = 19) \) and severely impaired \( (n = 5) \).

Participants ranked their family, friends and teachers as the most important sources of support whilst support groups, religious groups and the medical profession were ranked as least important. Life partners were rated as providing emotional support on a regular basis, as were teachers reported as providing information on a regular basis. Families of
participants were reported as rarely providing support in terms of emotional and practical issues. Mean scores portray life partners and families as rarely acting as sources of stress.

Independent T-Tests and analysis of variance (ANOVA) found no significant difference between independent variables (gender, age, family rituals, goal setting, demographic location, marital status, involvement in religion, adjustment level of child and age when child was diagnosed) and dependent variables (sense of coherence, proactive coping and belief in just world).

The Spearman Rho was utilised to analyse possible relationships between constructs. Proactive coping was correlated with belief in a just world ($r = .516, p < .01$), sense of coherence (total scale) ($r = 40, p < .05$) and sense of coherence (meaningfulness-subscale) ($r = .48, p < .01$) respectively. There was no correlation between belief in just world and sense of coherence. A partial correlation was conducted for belief in just world and proactive coping, while controlling for sense of coherence (meaningfulness) to clarify the possible influence of sense of coherence (meaningfulness) subscale on the correlation between belief in just world and proactive coping. The results indicated that sense of coherence (meaningfulness) moderates the relationship between belief in just world and proactive coping.

6.2.2.2 Qualitative results

Qualitative results obtained from the open-ended questions in the biographical questionnaire indicated that parents face practical challenges with regards to the child’s behavioural symptoms and social acceptance from others. Parents who reported practical challenges also reported less support from life partners. The need for practical support was found to be associated with lower end scores on the manageability subscale in the sense of coherence measure even though this could not be statistically verified.

Participants often indicated coping strategies such as planning daily events, social activities, communicating with significant others and physical activities. Proactive coping strategies most frequently reported included, planning for each day and the avoidance of social situations. Participants utilising proactive coping strategies seemingly reported higher scores on the sense of coherence (manageability subscale) than participants avoiding social situations.

Future expectations of parents for their children most frequently mentioned includes expectations that the child becomes self-sufficient and is content in the future. The majority of parents were able to report future expectations and goals in achieving future outcomes. An
observable trend suggests that participants who reported future expectations frequently scored higher on the belief in just world and sense of coherence (comprehensibility) scales than participants who did not report future expectations. Participants reporting happiness as a future goal for their child, as well as parents using religion as a coping mechanism seemed to frequently score higher on the sense of coherence (meaningfulness) scale.

6.3 INTERPRETATION OF RESULTS

6.3.1 GROUP DIFFERENCES

6.3.1.1 Age

Results indicating no statistical difference in age groups in terms of sense of coherence levels correspond with literature (Antonovsky & Sagy, 2001; Errikson & Lindstrom, 2005), stating that sense of coherence develops rapidly after adolescence and is stabilised at the age of 30. Underload and overload experiences and the resolution thereof are argued to be fully internalised when the individual is 30 years old and the average age of participants in the present sample is 40.6 years. Proactive coping literature is mainly focused on older populations (Ouwehand, 2005), in which proactive behaviour declines with age. This study, however, shows no statistical difference in age categories (30-52) with regards to proactive coping. Insignificant differences between age categories and belief in just world are, furthermore, supported by other studies (Begue & Bastonius, 2001).

6.3.1.2 Gender

In general, literature related to sense of coherence and gender differences (Cohen & Savaya, 2003; Klepp, Mastekaasa, Sorensen, Sandanger & Kleiner, 2007), and literature with specific reference to parents of a child with autism and sense of coherence (Sivberg, 2002; Oelofsen & Richardson, 2006), illustrates no significant differences between gender and levels of sense of coherence. Findings on gender differences in proactive coping have been inconsistent (Prenda & Lachman, 2001), where some attribute differences in gender, as a result of differential parenting practises, as informed by socialisation processes. The present study, however, found no significant differences in gender groups with relation to proactive coping. Insignificant differences in gender and belief in just world have also been illustrated in literature (Dalbert, 1999).

6.3.1.3 Religiousness

In the present study there was no significant differences between being religious or not, and investigated constructs. Belief in just world has, however, been correlated with religiousness
previously (Begue & Bastounis, 2003). Sample size and unequal distribution could have perhaps contributed to insignificant differences.

### 6.3.1.4 Family rituals

Brooks (2006) defines family rituals as “repeated patterns of behaviour that has symbolic meaning for the family and says something important of the family” (p141). Family rituals are, furthermore, associated with family functioning by creating opportunities for communication and involvement between family members. Larson (2006) states that families of children with autism tend to engage in fewer family rituals due to practical challenges associated with the diagnosis. Higgins et al. (2005), furthermore, found family functioning in these families to be marked by low levels of flexibility and cohesion, as explained in the Circumplex Model (Walsh, 2003). Responses on open-ended questions seem to confirm the abovementioned statements, for some parents noted that they avoid public places (e.g. church) as a coping measure and found it difficult to maintain dinnertime rituals due to dietary concerns associated with the diagnosis. Frequency distributions reported in the results chapter conveys an equal distribution of parents maintaining religious and dinnertime rituals, while most parents indicated that they maintain birthday rituals.

There was, however, no significant statistical difference between parents who reported no family rituals and belief in just world, sense of coherence and proactive coping and those who did. Findings would seem to suggest then that family rituals may not contribute or influence individual differences in the aforementioned constructs, but a larger study may provide more certainty.

### 6.3.1.5 Onset age of diagnosis

Literature on adjustment, of parents of a child with autism, highlights recurring and cyclic coping processes regardless of the onset age of the diagnosis (Wikler, 1986). The present study reaffirms this by finding no significant differences in age of onset of a child’s diagnoses and levels of belief in just world, sense of coherence and proactive coping.

### 6.3.1.6 Symptom severity

Symptom severity of the diagnosed child has been associated with higher levels of chronic parental stress and parental psychopathology (Mori et al., 2009; Benson & Karlof, 2009). In the present study, 19 participants described their child’s adjustment level as moderate. Single parenthood ($n = 6$), could equally be argued to increase stress proliferation in parents, leading to limited social and practical resources availability, which in turn increases practical
challenges. Research on the stability of sense of coherence and stress levels report mixed results (Nillson, et al., 2003; Volanen, Suominen, Lahelma, Koskenvuo & Silventoinen, 2007), as does proactive coping (Aspinwall, 2005). Begue and Muller (2002) report that belief in just world is negatively correlated with stressful conditions. Results in the present study found no statistically significant association between symptom severity and marital status and levels of belief in just world, sense of coherence and proactive coping.

6.3.1.7 Summary of group differences

In addition, the insignificant differences of means as calculated by the T-Test and ANOVA could be argued to relate to the assumption that the population (parents with autistic children) from which the sample was drawn is a very homogeneous or specialised group who experience similar situational characteristics and, therefore, may react to these situational characteristics in a similar fashion regardless of demographic variables such as gender. The distribution of the sample and variance was also limited due to small sample size and unequal representation of independent variables (e.g. gender) which could have inadvertently influenced statistical significance of results.

6.3.2 Belief in a Just World, Sense of Coherence and Proactive Coping

6.3.2.1 Instruments

The mean for the total score on the Orientation to Life Questionnaire for the current sample was 57.37 (statistical mean 4.41) with a standard deviation of 12.420. The total score mean can be considered to reflect moderate levels of sense of coherence if one considers that possible total scores range between 13 and 91. These results correspond with other studies that used the SOC-13 questionnaire to measure sense of coherence levels in parents of a child with autism. Olsson and Hwang (2002) found a mean score of 59.9 ($SD = 14.4$) and Mak et al. (2007) a statistical mean score of 4.62 ($SD = 1.01$).

The mean of the total score reached in the Reactions to Daily Life Questionnaire was calculated as 44.833 ($SD = 6.011$). This mean is considered to reflect a moderate to high propensity to engage in proactive coping by participants when taking into consideration that possible scores range from 14 to 56. The moderate to high levels of proactive coping correspond with other studies (Benson, 2010; Altiere & Von Kluge, 2009), which found that parents of children with autism often make use of proactive coping strategies. The mean of the total score of the Global Belief in Just World Scale was 21.566 ($SD = 7.951$) which is indicative of low to moderate levels of global belief in just world in participants when considering that possible scores range between 6 and 42.
6.3.2.2 Scale reliability

Cronbach alpha coefficients calculated for scales used in the present study were high, with Global Belief in Just World Scale as .834, Reactions to Daily Life Questionnaire as .811 and Orientation to Life Questionnaire total scale as .824. These highly reliable coefficients indicate high correlations between items in the scales and high internal consistency.

The subscales of the sense of coherence full scale produced low Cronbach alphas, 517 (Comprehensibility), .589 (Manageability) and .693 (Meaningfulness). Klepp et al. (2007) conducted a structural analysis of the SOC-13 scale (scale used in present study) with a generous sample (n = 1062) and found evidence to support the use of the sense of coherence scale as a unidimensional construct.

In the present study the lower Cronbach alphas of the subscales, in comparison with the full scale, seem to support the aforementioned findings by Klepp et al. (2007) and arguments originally set out by Antonovsky (1987) in that the sense of coherence scale measures a unidimensional construct. Interpretations using the subscales were, therefore, made with circumspection.

6.3.2.3 Belief in just world

Belief in just world was conceptualised within the Fantasy Realisation Model in terms of how belief in just world could potentially facilitate future-orientated thinking and by implication influence outcome expectations. Favourable outcome expectations were noted to increase the likelihood of goal commitment and proactive behaviour related to goal attainment processes (Klein et al., 2001; Lock et al., 1988; Wofford et al., 1999).

Belief in just world theory influencing outcome expectations, therefore, stipulates that individuals believe that their investment in long-term goals will be duly rewarded if their behaviour are in accordance with reciprocal principles informed by a social contract. In short, an individual who believes that the world is just will behave accordingly and set goals in the present because they believe that their goals will be attained in the future (Hafer & Begue, 2003). The individual, therefore, arguably engages in mental contrasting, as mentioned in the Fantasy Realisation Model, where the present (appropriate behaviour) and the future (deserved outcomes) are compared. Proactive coping has also been correlated with future-orientated thinking and outcome expectations (Ouwehand et al., 2008), where the perceived likelihood of reaching future expectations increases the likelihood of proactive coping behaviour.
In the present study the relationship between belief in just world and proactive coping would, therefore, seem to support the argument that belief in just world generating outcome expectations, influenced by the mental contrasting of current realities and future outcomes, is associated with the extent to which an individual is willing to engage in proactive efforts to reach future outcomes. In other words, the relationship between belief in just world and proactive coping would, therefore, seem to support the association between the proverbial “pull effect”, of favourable outcomes and proactively engaging in behaviour in current realities to reach outcomes. This finding, furthermore, raises the question which could potentially be answered in a longitudinal study, whether the relationship between the two constructs leads to eventual goal attainment.

6.3.2.4 Sense of coherence

Sense of coherence was conceptualised to influence goal feasibility as a determinant of commitment. Goal feasibility is influenced by the individual’s perceptions of how capable they are in handling stressors in current realities, and has been argued to influence goal commitment processes by facilitating success expectations (Lock, et al., 1988).

The Fantasy Realisation Model illustrates that individuals tend to recognise and utilise potential resources when they mentally contrast current realities and possible futures Oettingen (1999). Cognitive reappraisal, as part of the coping theory, resonates with this finding, where demand appraisals and resource appraisals are considered in establishing equilibrium between the individual and the environment (Schwarzer & Taubert, 2002). With respect to current realities, commitment should, therefore, be strengthened when individuals experience a sense of understanding current life events and feel that they have resources at their disposal to manage their lives.

The relationship between sense of coherence and proactive coping was expected and seems to support the argument set out above in that goal feasibility influences goal commitment processes associated with proactive coping. The extent to which an individual employs proactive coping has, furthermore, been shown to be influenced by perceived ability to manage current stressors (Aspinwall, 2005). Thus, in the present study there is indication that perceived comprehensiveness and manageability of current realities informing goal feasibility are associated with the likelihood of proactively managing goals in order to reach future outcomes. In other words, it would seem possible to argue that feeling as if one understands what is happening to one and having the resources to manage situations, is associated with the extent to which one engages in proactive coping behaviour.
Originally it was argued that belief in just world and sense of coherence was theoretically similar to the extent in which both constructs are able to create perceptions of stable and manageable realities, in turn, dually informing goal feasibility. Sense of coherence theory is described as a global orientation that influences the extent to which the individual feels that stressors are comprehensible and manageable (Antonovsky, 1987). Belief in a just world equally mentions that a strong belief in a just world facilitates wellbeing by positively reconstructing one’s life according to personal theories on how to manage difficult life situations positively. The management of one’s life is argued to facilitate feelings of competence of having adequate resources in managing stressors and challenges are progressively seen as stable and orderly which, in turn, facilitates perceptions of predictability (Dalbert, 1999).

Surprisingly enough, findings in the present study indicate no relationship between belief in just world and sense of coherence. There are several different interpretations for this finding. Firstly, in the present study, belief in just world was operationalised by the Global Belief in Just World scale (Lipkus, 1991). The aforementioned scale was developed in order to address poor internal consistency found in the original Just World Scale by Rubin and Peplau (1975), and items, therefore, include both general and personal belief in just world statements. Dalbert (1999), however, found a personal belief in just world to be more closely related to wellbeing than a general belief in a just world, in that personal experiences of injustice induce greater feelings of a threat to justice beliefs than general experiences and, therefore, lead to stronger coping efforts. The use of the Personal Belief in Just World Scale (Dalbert, 1999) instead of the Global Belief in Just World Scale could, therefore, perhaps have lead to a correlation between sense of coherence and belief in just world. Secondly, one could argue that although both constructs present theoretical similarity and are both correlated with a third variable – proactive coping, they present two distinctive predictor values in terms of how they lead to goal commitment and proactive coping. Two plausible arguments for why the two constructs may have differential predictor values are, firstly, that belief in just world is more concerned with moral processing than sense of coherence and, secondly, that coping processes associated with belief in just world are more focused on future outcomes than in sense of coherence.

6.3.2.5 Proactive coping

The Fantasy Realisation Model illustrates an energization process whereby high outcome expectations of goals lead to proactive goal attainment processes in order to eliminate potential barriers to goal attainment. Mental contrasting of current realities (influenced by goal feasibility) and future outcomes (influenced outcome expectations) is, therefore, conceptualised to induce proactive coping.
In proactive coping, future events are perceived as meaningful pursuits that can be accomplished by actively managing goals in the present reality. Whereas previous conceptualisations of coping focused on risk management or the avoidance of stressors as a whole, proactive coping describes future risks in terms of it being surmountable challenges in which goals have to be actively managed (Greenglass, 2002).

The findings of the present study illustrate a relationship between both sense of coherence and belief in just world with proactive coping and, therefore, confirm several theoretical assumptions. Firstly, findings support the notion that conjointly considering current realities and future expectations is associated with proactive behaviours. Secondly, that both situational characteristics (chronic stress) and dispositional characteristics (belief in just world and sense of coherence) seem to influence the choice of proactive behaviour and, lastly, that outcome expectations are related to the perceived likelihood of attaining goals as well as perceived meaningfulness of outcomes.

The meaningfulness subscale of sense of coherence was the only subscale which correlated with proactive coping. This relationship was expected when one considers Antonovsky’s (1987) argument that the meaningfulness component leads to a motivation in individuals to actively manage their behaviour in order to reach meaningful outcomes. In addition, proactive coping theory indicates future events as meaningful challenges that need to be overcome by actively managing one’s goals (Scharzer & Taubert, 2002). Both constructs can, therefore, be argued to emphasise the importance of the perceived meaningfulness of goals in motivating individuals to engage in proactive coping behaviour in order to reach meaningful future outcomes.

A partial correlation found the sense of coherence (meaningfulness) subscale as a moderating variable in the correlation between belief in just world and proactive coping. All three constructs involve meaning as a motivational force in coping and goal commitment processes. Belief in just world theory states that reality is perceived as meaningful by the individual by believing that their day to day actions contribute to meaningful outcomes (Dalbert, 1999). Sense of coherence (meaningfulness) is argued by Antonovsky (1987), to increase motivation in an individual to actively engage in meaningful outcomes. Proactive coping, furthermore, involves the management of goals in order to overcome meaningful challenges leading to opportunities for personal growth (Greenglass, 2002).

The moderating effect of the meaningfulness subscale seems to support the argument in that the extent to which goals are perceived as meaningful moderates goal commitment and goal attainment processes. Literature on commitment and goal commitment mentions how
individuals are more likely to commit to behaviours, thoughts and decisions when they expect a personally defined meaningful outcome (Impett et al., 2005; Le & Agnew, 2003). Findings of Human-Vogel and Mahlangu (2009) stating that individuals commit to goals that are meaningful and that correlate with their identity preferences seem to be supported by findings in the present study. In other words, goals that reflects personal preferences or values increases motivation in the individual to actively manage and commit to goals. In committing to meaningful goals, as defined by personal identity, difficulties are arguably seen as challenges that can be overcome, indicating an upward-regulation of emotions associated with commitment processes, whereas other coping efforts exclusively related to goal feasibility and outcome expectations, relate to the down-regulation of emotions (Human-Vogel & Mahlangu, 2009). The energization process as a determinant of goal commitment, as outlined by the Fantasy Realisation Model, could, therefore, be argued to be influenced by the extent to which the individual defines goals and outcomes as being meaningful. In other words, the moderating effect of meaningfulness on the correlation between belief in just world and sense of coherence, therefore, seems to suggest that the determinants of goal commitment, as discussed in Chapter Two (goal feasibility and outcome expectations), may be moderated by the perceived meaningfulness of goals.

### 6.3.2.6 Summary of interpretations

The comparisons of means of independent variables (such as demographic variables, support structures and goal commitment) with regards to dependent variables (sense of coherence, belief in just world and proactive coping) produced no statistically significant differences. These results were compared to other studies in which comparisons were made. It was noted that insignificant differences potentially relate to the homogeneous or specialised nature of the population (parents of children with autism) who experience similar situational characteristics and, therefore, may react to these situational characteristics in a similar fashion regardless of independent variables such as gender and age. The unequal distribution of independent variables in the sample due to small sample size was also argued to have inadvertently influenced results.

Mean total scores on the administered scales suggested low to moderate belief in just world, moderate to high proactive coping and moderate sense of coherence levels. Mean total scores of the Orientation to Life Questionnaire in the present study correspond to results in other studies, measuring sense of coherence in parents of children diagnosed with autism. All scales, furthermore, produced high Cronbach alphas with the exception of the subscales of the Orientation to Life Questionnaire. The present study supports arguments for the unidimensionality of the construct due to low internal consistency of subscales.
The correlation between belief in just world and proactive coping was argued to be indicative of how outcome expectations and future-oriented thinking, influenced by belief in just world, are associated with active goal attainment processes such as proactive coping. The correlation between the sense of coherence total scale and proactive coping was argued to be related to goal feasibility in the sense that current realities which are perceived as comprehensive, and perceived resource availability in managing stressors is associated with the likelihood of engaging in proactive coping. The absence of a correlation between belief in just world and sense of coherence was contributed to two possible reasons. The first reason related to a personal belief in just world being more closely related to coping efforts and wellbeing than a global belief in a just world due to the urgency of a personal belief in just world. Secondly, it was argued that the constructs, although theoretically similar, have different predictor values.

It was argued that the moderating effect of sense of coherence (meaningfulness) on the correlation between belief in just world and proactive coping is possibly related to the perceived meaningfulness of selected goals and outcome expectations. It was argued that perceived meaningfulness of goals could perhaps moderate other determinants of goal commitment such as goal feasibility (likelihood of managing behaviour in the present to reach future outcomes) and outcome expectations (likelihood of attaining goals).

Within the conceptual framework outlined in Chapter Three, the interpretation of results seem to suggest that both sense of coherence and belief in just world are associated goal determinant processes (goal feasibility and outcome expectations) in current realities and that these processes are associated with proactive coping. Sense of coherence and belief in just world, however, seem to regulate goal determinant processes differently. Perceived meaningfulness of goals and outcome expectations, furthermore, seem to regulate goal determinant processes.

6.4 CONTRIBUTION OF THE STUDY

6.4.1 THEORETICAL CONTRIBUTION

Longitudinal research has questioned the temporal and stable properties of sense of coherence as set out by Antonovsky (1987). Researchers have found that stress in general, but specifically chronic stress, often influences the strength of an individual’s sense of coherence (Breslin, et al., 2006; Feldt, Leskinen, Kinnunen & Ruopila, 2003), and that sense of coherence stabilises at the age of 30 years (Antonovsky & Sagy, 2001; Errikson & Lindstrom, 2005). Results of the present study seem to support literature on the developmental of sense of coherence, by indicating that age does not influence sense of
coherence levels in the present sample. In addition, it was found that levels of chronic stress associated with symptom severity of diagnosed children and marital status does not influence sense of coherence levels either.

Lazarus, as quoted in Olsson and Hwang (2002), states that the evaluation of a stressful situation is dependent on both personal and stressor characteristics. It therefore takes both a stressful situation and a vulnerability to generate a stress reaction. Research on proactive coping has predominantly focused on situational characteristics (e.g. type of stressor), even though there is reason to believe that individual factors (e.g. sense of coherence and belief in just world) may also have an influence on proactive coping behaviour (Ouwehand et al., 2006). In the present study, the correlations of both sense of coherence and belief in just world with proactive coping suggest that these dispositional characteristics are in fact associated with proactive coping. Hence, the present study contributes to the literature on proactive coping by illustrating that dispositional characteristics related to goal feasibility, influenced by perceptions of comprehensive, manageable and meaningful current realities (captured in sense of coherence) and outcome expectations, influenced by how confident one is that goals will be reached (captured in belief in just world), may influence proactive coping behaviour. Further larger scale quantitative or qualitative studies are needed to explore causal mechanisms with regards to the interaction between situational and dispositional characteristics in proactive coping.

Furthermore, the absence of a relationship between belief in just world, sense of coherence and the presence of a relationship of both constructs with proactive coping was a bit puzzling because both constructs seem to emphasise the importance of comprehensive current realities and the availability of resources in managing stressors. One explanation for this finding is that a personal belief in a just world acts as greater personal coping mechanism than a global belief in a just world, due to the urgency of personal injustices. Alternatively, this finding seems to suggest differential predictor values in both constructs with regards to proactive coping. Different predictor values possibly relate to the greater emphasis on morality and future-oriented thinking in belief in just world in comparison to sense of coherence. However, future studies are needed to explore differences and similarities between these constructs in facilitating proactive coping.

6.4.2 METHODOLOGICAL CONTRIBUTIONS

Recently studies (Breslin et al., 2006; Eriksson & Lindstrom, 2005; Feldt et al., 2003; Klepp et al., 2007; Schurmann, et al., 2003) critically validated sense of coherence as both a theory and as an instrument. These studies suggest the need for more clarification and exploration regarding the dimensionality of the sense of coherence construct. Low Cronbach alphas on
the subscales in the present study reinforce the argument for using sense of coherence as a unidimensional construct, but further research is needed with larger samples that are more equally distributed.

The Orientation to Life Questionnaire has been found to be valid for South African populations (Wissing & Van Eden, 2002). The Global Belief in Just World scale and Reactions to Daily Life Questionnaire have, however, to my knowledge (which is based on an extensive literature review), not been utilised in South African populations. In the present study, high Cronbach alphas on the Reactions to Daily Life Questionnaire and Global Belief in Just World scale seem to support the appropriateness of these scales for South African populations with similar characteristics to the present sample. However, future studies including samples which are representative of all population groups with greater distribution of demographic variables are needed in order to conclude that these scales are valid for all South African populations.

6.4.3 PRACTICAL CONTRIBUTIONS

The results of the present study have some practical significance for helping professionals working with families with children diagnosed with autism. Bitter (2009) mentions eight lenses, or perspectives, from which a family therapist perceives families. The extent to which parents make use of proactive coping, set goals and engage in future-oriented thinking seems to support the appropriateness of a teleological lens in family therapy. Psychologists working with families with a child diagnosed with autism, employing a teleological lens (the study of final causes, endpoints, goals and purposes) will, therefore, be able to understand what motivates or what the purpose of the family system is. In using solution focused family therapy (associated with the teleological lens) the helping professional would be able to engage clients in optimistic conversations of future and set proactive goals in reaching future outcomes (Bitter, 2009).

Therapy goals of parents with autistic children should, however, be established in collaboration with parents to ensure that goals are perceived as meaningful. The type of goals, as well as the outcome expectations of therapy goals, should be meaningful for the parent in order to facilitate goal commitment processes. The content of therapy goals should, furthermore, reflect a process in which both current realities (stressors) and future expectations are reflected on, in order to internalise expectancy-based goal commitment.

Practitioners should also take note that results of the present study seem to suggest a need for more information on the management of the diagnosis, as well as practical day to day care giving support. Social acceptance from significant others, including family, friends and
society in terms of the behavioural symptoms associated with autism, also seem to be important. Practitioners should, therefore, consider including outcomes in therapy such as practical solutions for day to day practical challenges and psycho-education on what the diagnosis entails and how to manage it. It would, furthermore, be advisable to formulate strategies in which parents are enabled to seek and maintain additional social support structures.

Important support structures utilised by parents that could be incorporated in therapy include life partners, families and teachers. Support groups and the medical profession seem to be utilised to a lesser extent. Support groups and the medical profession are, however, usually seen as important resources to parents of a child diagnosed with autism. Therefore, existing services, including the medical profession and support groups, do not seem to meet some parental needs and may require modification, perhaps addressing specific types of stressors that parents face and facilitating proactive coping strategies.

6.5 LIMITATIONS OF THE CURRENT STUDY

Although results reported in the present study are encouraging, some limitations for the current study should be mentioned. Firstly, the sample size was unexpectedly small ($n = 30$), reducing statistical power and thereby potentially limiting the study’s findings. Parents who were approached to complete the questionnaire, but failed to return it, mentioned that they did not have enough resources (time and emotional) to do so due to the demands posed by the diagnosed child. Secondly, the response rate was not as high as might be desired, raising uncertainty about the sample’s representativeness. Thirdly, the sample was unequally distributed according to demographic variables such as age and gender, rendering these comparisons as tentative.

Another possible limitation of the present study is the use of the Global Belief in a Just World scale instead of the Personal Belief in a Just World scale. Dalbert (1999) found a personal belief in just world to be more closely related to wellbeing and coping efforts than a global belief in a just world, in that personal experiences of injustice induce greater feelings of a threat to justice beliefs than general experiences and, therefore, lead to stronger coping efforts. The utilisation of the Personal Belief in Just World scale could have perhaps contributed to stronger correlations between constructs and have enriched findings.

The major purpose of exploratory research, such as the present study, is however the clarification of ideas, methods and the formulation of questions informing a later, more precise study (Struwig & Stead, 2001) and does not necessarily have a prerequisite for generalisation (Babbie, 2005). The main purpose of the present study was, therefore,
informed by its exploratory nature where possible relationships between constructs were explored in order to inform hypotheses in later large scale study.

6.6 RECOMMENDATIONS FOR FUTURE STUDIES

In light of the present findings, some directions for future research can be recommended:

- The study warrants replication with a larger sample with a greater distribution of demographical variables in order to improve statistical power and clarify tentative interpretations.

- The clarification of differential predictor values in belief in just world and sense of coherence, as indicated in the present study, could be researched by including the Personal Belief in a Just World Scale (Dalbert, 1999) and other measures exploring different activation paths.

- The present study included a cross-sectional correlational design, which indicated some trends of association between constructs without making assumptions about causal mechanisms. Future studies employing a qualitative or mixed method approach could arguably enrich understanding of the relationship between constructs by allowing for more in depth understanding. It is worthwhile to mention to future researchers that many participants who completed the questionnaire mentioned their willingness (or even preference) in participating in qualitative data collection procedures such as interviews, observations and focus groups.

- Future longitudinal research could perhaps focus on whether or not the relationships between variables lead to goal attainment in parents. It would be interesting to find out whether or not proactive coping behaviours informed by mental contrasting (goal feasibility and outcome expectations) lead to successful goal attainment outcomes specifically within the context of chronic stress.

- The moderating effect of meaningfulness in the relation between belief in just world and proactive coping could be researched further within the context of commitment processes.

- Present results indicating that parents rarely utilise support groups and the medical profession as sources of support, indicate that a needs analysis on the needs of parents of a child with autism would be beneficial in order to assist support groups and the medical profession in meeting specific needs of these parents.
Further research with regards to the dimensionality of the sense of coherence scale can be considered as a viable option for future research. In the present study the small sample size precluded a factor analysis and a larger sample would, therefore, be advised.

Future studies, including the Reactions to Daily Life Questionnaire and Global Belief in Just World scale as data collection methods with a large representative sample of all demographic groups in South Africa, is needed in order to determine the appropriateness of scales for South African populations.

The independent T-Test results illustrated some differences in means (although not statistically significant) between participants who described themselves as religious and those who did not on all three constructs. Qualitative responses also illustrated this trend. Future research with larger samples may consider exploring the influence of religious affiliation on constructs.
Date: 19 January 2010  
Name of Researcher: Meiring Come Jeanne  
Address of Researcher: Hermalo St 10  
Telephone Number: 0122526223/0829406225  
Fax Number: N/A  
Research Topic: Exploring the relationship between just world beliefs, sense of coherence and proactive coping in parents coping with their children's chronic illness and disability  
Number and type of schools: 1 LSEN School  
District/HSO: Tshwane South

**Re: Approval in Respect of Request to Conduct Research**

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school(s) and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

Permission has been granted to proceed with the above study subject to the conditions listed below being met, and may be withdrawn should any of these conditions be flouted:

1. **The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.**
2. **The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.**
3. **A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researchers have been granted permission from the Gauteng Department of Education to conduct the research study.**
AN EXPLORATORY STUDY OF THE RELATIONSHIP BETWEEN A BELIEF IN A WORLD, SENSE OF COHERENCE AND PROACTIVE COPING IN DEALING WITH CHRONIC STRESSORS

SECTION A: DEMOGRAPHIC INFORMATION:

(All information will remain confidential and anonymity is assured)

In which demographic area do you live? _________________________________________

What is your gender? Male | Female

What is your age? _____________________

Indicate your marital status

Married | Single | Divorced

If married, how long have you been married?______________________________

Please state your religious denomination _________________________________

How involved would you say are you in religious activities?
___________________________________________________________________

How would you describe the adjustment level of your child ____________________
___________________________________________________________________

How old was your child when he or she was diagnosed? ______________________
___________________________________________________________________

Please provide the following information about your child/children

<table>
<thead>
<tr>
<th>Age of child</th>
<th>Existence of a diagnosis?</th>
<th>Diagnosis</th>
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<tbody>
<tr>
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<td>Ｖ7</td>
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<td>Ｖ9</td>
</tr>
<tr>
<td>Ｖ10</td>
<td>Ｖ10</td>
<td>Ｖ10</td>
</tr>
</tbody>
</table>
Please indicate in order of importance, your main sources of support
1 – most important; 6 – least important

Family
Friends
Support groups
Religious groups
Medical profession
School

Please rate how often you depend on the following people/institutions/groups for emotional support:

Partner / husband
My family
Support groups
Religious groups / church
Teachers
…other (please specify)

Please rate how often you depend on the following people/institutions/groups for practical (caregiving; day-to-day arrangements) support:

Partner / husband
My family

Support groups

Religious groups / church

Teachers

…other (please specify)

_________________________________________________________________
_________________________________________________________________

Please rate how often you depend on the following people/institutions/groups for information:

Partner / husband

My family

Support groups

Religious groups / church

Teachers

…other (please specify)

_________________________________________________________________
_________________________________________________________________

As a parent, where do you feel you need more support?

_________________________________________________________________
_________________________________________________________________
Please rate how often following people/institutions/groups are sources of stress:

<table>
<thead>
<tr>
<th>People/Institutions/Groups</th>
<th>Very often</th>
<th>Often</th>
<th>Rarely</th>
<th>Hardly ever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner / husband</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My family</td>
<td>Regularly</td>
<td>Often</td>
<td>Rarely</td>
<td>Hardly ever</td>
</tr>
<tr>
<td>Support groups</td>
<td>Regularly</td>
<td>Often</td>
<td>Rarely</td>
<td>Hardly ever</td>
</tr>
<tr>
<td>Religious groups / church</td>
<td>Regularly</td>
<td>Often</td>
<td>Rarely</td>
<td>Hardly ever</td>
</tr>
<tr>
<td>Teachers</td>
<td>Regularly</td>
<td>Often</td>
<td>Rarely</td>
<td>Hardly ever</td>
</tr>
</tbody>
</table>

....other (please specify)
_________________________________________________________________
_________________________________________________________________
As a parent what do you do to cope with these stressors?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
What precautionary measures do you as a parent take to prevent future stressors?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Does your family maintain special routines and/or rituals on the following occasions?

<table>
<thead>
<tr>
<th>Birthdays</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If yes, please describe what your family does?
_________________________________________________________________
Religious Holidays

Yes [ ] No [ ]

If yes, please describe what your family does?
______________________________________________________________________
______________________________________________________________________

Dinner time

Yes [ ] No [ ]

If yes, please describe what your family does?
______________________________________________________________________
______________________________________________________________________

As a parent, please discuss the challenges you experience every day?
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

What important lessons have you learned from your experiences of raising a child with special needs?
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

What future expectations do you have for:
Your child?
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

Yourself as a parent?
______________________________________________________________________
______________________________________________________________________
Have you set goals in achieving these outcomes? Yes | No

If yes what are these goals?

How would you describe yourself commitment in efforts pertaining achievement of these goals?
APPENDIX 3
GLOBAL BELIEF IN JUST WORLD SCALE (BJW)

This questionnaire contains questions about attitudes toward justice in the world. Kindly select one of the options that correspond to your attitude regarding the various statements.

1. I feel that people get what they are entitled to have.

2. I feel that a person's efforts are noticed and rewarded.

3. I feel that people earn the rewards and punishments they get.

4. I feel that people who meet with misfortune have brought it on themselves.

5. I feel that people get what they deserve.

6. I feel that rewards and punishments are fairly given.
APPENDIX 4
REACTIONS TO DAILY LIFE QUESTIONNAIRE (PC SCALE)

The following statements deal with reactions you may have to various situations. Indicate how true each of these statements is depending on how you feel about the situation. Do this by checking the most appropriate box.

1. I am a “take charge” person.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

2. I try to let things work out on their own.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

3. After attaining a goal, I look for another, more challenging one.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

4. I like challenges and beating the odds.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

5. I visualise my dreams and try to achieve them.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

6. Despite numerous setbacks, I usually succeed in getting what I want.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

7. I try to pinpoint what I need to succeed.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

8. I always try to find a way to work around obstacles; nothing really stops me.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

9. I often see myself failing so I don't get my hopes up too high.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

10. When I apply for a position, I imagine myself filling it.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
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<th>completely true</th>
</tr>
</thead>
</table>
11. I turn obstacles into positive experiences.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

12. If someone tells me I can't do something, you can be sure I will do it.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

13. When I experience a problem, I take the initiative in resolving it.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>

14. When I have a problem, I usually see myself in a no-win situation.

<table>
<thead>
<tr>
<th>not at all true</th>
<th>barely true</th>
<th>somewhat true</th>
<th>completely true</th>
</tr>
</thead>
</table>
APPENDIX 5
**ORIENTATION TO LIFE QUESTIONNAIRE (SOC)**

Here is a series of questions related to our lives. Each question has seven possible answers. Please mark the number that expresses your answer, with numbers one and seven being extreme answers. If the words under 1 are right for you circle 1, if the words under 7 is right for you circle 7. If you feel differently, circle the number which best expresses your feelings. Please only give one answer at each question.

1. Do you have the feeling that you don’t really care about what goes on around you?

| 1. Very seldom or never | 2. | 3. | 4. | 5. | 6. | 7. Very often |

2. Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well?

| 1. Never happened | 2. | 3. | 4. | 5. | 6. | 7. Always happened |

3. Has it happened that people whom you counted on disappointed you?

| 1. Never happened | 2. | 3. | 4. | 5. | 6. | 7. Always happened |

4. Until now your life has had:

| 1. No clear goals or purpose at all | 2. | 3. | 4. | 5. | 6. | 7. Very clear goals and purpose |

5. Do you have the feeling that you’re being treated unfairly?

| 1. Very often | 2. | 3. | 4. | 5. | 6. | 7. Very seldom or never |

6. Do you have the feeling that you are in an unfamiliar situation and don’t know what to do?

| 1. Very often | 2. | 3. | 4. | 5. | 6. | 7. Very seldom or never |

7. Doing the things you do every day is:

| 1. A source of deep pleasure and satisfaction | 2. | 3. | 4. | 5. | 6. | 7. A source of pain and boredom |
8. Do you have very mixed-up feelings and ideas?

| 1. Very often | 2. | 3. | 4. | 5. | 6. | 7 Very seldom or never |

9. Does it happen that you have feelings inside you would rather not feel?

| 1. Very often | 2. | 3. | 4. | 5. | 6. | 7 Very seldom or never |

10. Many people – even with a strong character - sometimes feel like sad sacks (losers) in certain situations. Have you felt like this in the past?

| 1. Never | 2. | 3. | 4. | 5. | 6. | 7 Very often |

11. When something happened, have you generally found that:

| 1. You overestimated or underestimated its importance | 2. | 3. | 4. | 5. | 6. | 7 You saw things in the right proportions |

12. How often do you have the feeling that there’s little meaning in the things that you do in daily life?

| 1. Very often | 2. | 3. | 4. | 5. | 6. | 7 Very seldom or never |

13. How often do you have feelings that you are not sure that you can keep under control?

| 1. Very often | 2. | 3. | 4. | 5. | 6. | 7 Very seldom or never |
INVITATION TO PARTICIPATE IN RESEARCH

THE RELATIONSHIP BETWEEN JUST WORLD BELIEFS, SENSE OF COHERENCE

AND PROACTIVE COPING

It is required of students completing their Masters degree in Educational Psychology at the University of Pretoria to undertake independent research in a field of their interest. This letter contains information regarding one such a research endeavour in order to inform potential participants regarding their choice to participate as well as to provide consent in an informed manner. The researcher undertaking this research is under strict supervision of a senior lecturer at the University, and has received ethical clearance from the Ethics Board of the University of Pretoria, which bounds conduct that is ethical and honest.

What is the research about?

The aim of this research is to explore the experiences of parents of children diagnosed with a chronic disability. Previous research has shown that specifically parents of children diagnosed with Autism experience chronic stressors in adapting to new realities. Related research also illustrates how individuals experiencing chronic stressors anticipate and relate to future goals in a differential manner to other individuals. The information generated by this study will therefore provide insight into the future expectations of parents of children diagnosed with Autism and contribute to theoretical clarification benefiting future research endeavours on this topic.

What is expected of you?

As a participant you will be asked to complete three questionnaires called: The Personal Belief in Just World Scale, Proactive Coping Inventory and the Orientation to Life Questionnaire. Thereafter you will have the option to participate in a semi-structured interview lasting approximately 90 minutes. The questionnaires will assist the researcher in determining how you experience future outcomes, current realities as well as how you proactively change current realities in relation to future expectations. The goal of the interview will be to gain an in depth understanding of the aforementioned. All interviews will be audio recorded using a digital audio recorder.

Participation in this research is entirely voluntary and parents will not be coerced or manipulated in any way to participate or to divulge information. Individuals can at any time decide to withdraw their contribution to the study and their wishes will be respected, and all information will be withdrawn from the study. Participants are also urged to ask questions and gain clarity about any aspect unclear to them throughout the process.
Confidentiality and anonymity:

All information provided to the researcher will be kept in the strictest confidence and will only be used for the purpose of research. The researcher will not divulge any contact of identifying information to any other third party (e.g. school or any other third party) Participants are not required to provide their names and pseudonyms will be used when necessary in reporting the findings.

Presentation of results:

The findings of this study will be presented in the form of a Masters Dissertation at the end of 2010. Should this study provide valid and noteworthy insight, the possibility does exist for it to be published in a peer reviewed journal. The information gathered for this research becomes the property of the University of Pretoria and may be used for further research in the future.

Thank you for your interest in participating in this research. Please do not hesitate contacting me (Jeanne Meiring – 0829406225) or my supervisor (Dr Salome Human-Vogel 012 420 2770) if you are unsure about any aspect regarding this research. Kindly fill out the following letter in order to provide informed consent for participating in the research.

LETTER OF INFORMED CONSENT

I have read the above mentioned information and would like to voluntarily participate in this research. I am aware of what is expected of me, and that I have the right to withdraw at any time should I feel in any way uncomfortable or mislead. By signing this form I give consent to record any discussions and information relevant to this research study. Furthermore I am acknowledging the fact that I am participating of own free will and have not been forced, manipulated, mislead or coerced into taking part.

......................................                                  ..............................................
Signed – Participant                                        Date

17 February 2010

Signed – Researcher                                          Date
### Independent Samples T-Test: gender and belief in just world sense of coherence and proactive coping

#### Independent Samples Test – Gender

<table>
<thead>
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<th>t-test for Equality of Means</th>
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<td>Sig.</td>
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### Independent Samples T-Test: age and belief in just world sense of coherence and proactive coping

#### Independent Samples Test – Age

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Independent Samples T-Test: family rituals (dinner) and belief in just world sense of coherence and proactive coping

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Independent Samples T-Test: family rituals (religion) and belief in just world sense of coherence and proactive coping

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Independent Samples T-Test: family rituals (birthday) and belief in just world sense of coherence and proactive coping

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One way ANOVA – demographic location and belief in just world, sense of coherence and proactive coping

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One way ANOVA – marital status and belief in just world, sense of coherence and proactive coping

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One way ANOVA – adjustment level child and belief in just world, sense of coherence and proactive coping

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One way ANOVA – age when child was diagnosed and belief in just world, sense of coherence and proactive coping

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UNIVERSITY OF PRETORIA
FACULTY OF EDUCATION
RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE

DEGREE AND PROJECT
Med: Educational Psychology
Just World Beliefs, Sense of Coherence and Proactive Coping in parents with a child with autism

INVESTIGATOR(S)
Corne Jeanne Meiring

DEPARTMENT
Department of Educational Psychology

DATE CONSIDERED
31 August 2010

DECISION OF THE COMMITTEE
APPROVED

Please note:
For Masters applications, ethical clearance is valid for 2 years
For PhD applications, ethical clearance is valid for 3 years.

CHAIRPERSON OF ETHICS COMMITTEE
Prof L Ebersohn

DATE
31 August 2010

CC
Dr S Human-Vogel
Ms Jeannie Beukes

This ethical clearance certificate is issued subject to the following conditions:

1. A signed personal declaration of responsibility
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted
3. It remains the students’ responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.