

University of Groningen

Unmitigated communion and support providers' psychological wellbeing

Jin, Lihua

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2012

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Jin, L. (2012). *Unmitigated communion and support providers' psychological wellbeing*. s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

**Unmitigated Communion
and Support Providers'
Psychological Wellbeing**

Lihua Jin

RIJKSUNIVERSITEIT GRONINGEN

Unmitigated Communion and Support Providers' Psychological Wellbeing

Proefschrift

ter verkrijging van het doctoraat in de
Medische Wetenschappen
aan de Rijksuniversiteit Groningen
op gezag van de
Rector Magnificus, dr. E. Sterken,
in het openbaar te verdedigen op
woensdag 13 juni 2012
om 14.30 uur

Colofon

Cover image: Inspired by 会说话的稻草人 之一, LI Dai, China

Cover and lay-out: Boyi Studio

Print: CPi Wöhrmann Print service

Preparation of this thesis was funded by the Research Institute SHARE, the faculty of Medical Sciences (UMCG), and the University of Groningen.

ISBN: 978-90-367-5487-3

© 2012, Lihua Jin

door

Lihua Jin

geboren op 6 februari 1979

te Heilongjiang, China

Promotores:

Prof. dr. M. Hagedoorn
Prof. dr. R. Sanderman
Prof. dr. N.W. van Yperen

Beoordelingscommissie:

Prof. dr. M.J.M. Geenen
Prof. dr. J.W. Groothoff
Prof. dr. A.V. Ranchor

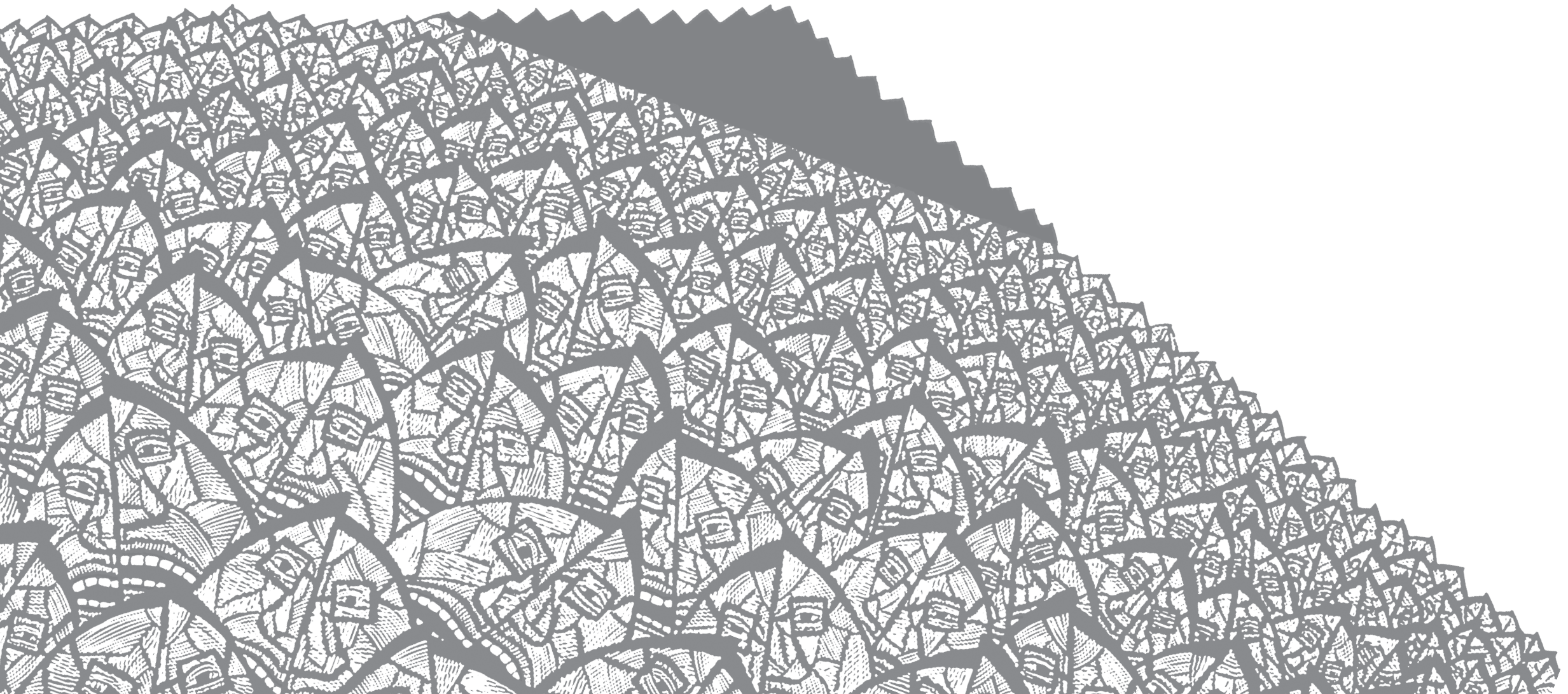
To grandpa 致祖父
and Belle

Contents

Chapter 1	General introduction	13
Chapter 2	Unmitigated communion in support provision	23
Chapter 3	Depressive symptoms and unmitigated communion in student support providers	55
	Study 3.1	60
	Study 3.2	64
Chapter 4	Unmitigated communion and depressive mood: a mediated moderation model	79
	Study 4	
Chapter 5	Unmitigated communion and psychological distress in spouses of patients with end-stage renal disease	99
	Study 5.1	104
	Study 5.2	111
Chapter 6	General discussion	121
	References	137
	Summary	159
	Samenvatting	167
	Acknowledgement	174
	List of SHARE dissertations	178

CHAPTER 1

GENERAL INTRODUCTION



When individuals are confronted with problems or stressful events, such as being unemployed, failing exams or experiencing illness, it is common for those who are close to them to provide help and support. Supporting a close one in times of need might not only be beneficial for the recipient of support but also for the provider of support. The most frequently noted positive effects in the literature for the latter are, for instance, enhanced self-image, increased feelings of self-control, satisfaction with one's caregiving role, increased perception of being needed and important, and greater wellbeing (Gleason, Iida, Bolger, & Shrout, 2003; Knoll, Kienle, Bauer, Pffueller, & Luszczynska, 2007; Luks, 1988; Mowbray et al., 1996; Nijboer et al., 1998; Schwartz & Sendor, 1999; Williamson & Clark, 1989; Yinon & Landau, 1987). However, for some support providers, engaging in helping activities might result in burden and might have negative health consequences such as strains (Cantor, 1983), emotional distress (Coyne & Smith, 1991; Ingersoll-Dayton & Raschick, 2004; Windsor, Anstey, & Rodgers, 2008) or even becoming ill themselves (Schulz, Vitaliano, & Williamson, 1990). It is therefore important to understand why support providers under similar circumstances show great variability in their psychological wellbeing.

The goal of this thesis, therefore, is to focus on psychological wellbeing in support providers and investigate the role of a personality trait, namely unmitigated communion (UC). In short, this trait indicates that caring for others is a central aspect of the individuals' self-identity. As a consequence, support providers with this personality trait are susceptible to psychological distress in contrast to those low on UC. The results of this research will enhance our insight into the role of UC in support providers' psychological wellbeing and help identify support providers who might be at risk of experiencing negative psychological wellbeing.

Past Research on Support Providers' Psychological Wellbeing

A sizeable amount of empirical studies from different areas of research (e.g., caregiving research, research on altruistic and volunteering behaviours) has investigated psychosocial factors that contribute to or attenuate psychological wellbeing

of support providers. To date, three sources of factors are generally identified as important: (a) the characteristics of the care (e.g., the duration, intensity, and complexity of the care task), (b) the social environment (e.g., social support one receives from one's social network), and (c) the characteristics of the support provider (e.g., socio-demographic factors and personality characteristics).

A rich body of research supports the first two sources (i.e., characteristics of the care and social environment) that may influence support providers' psychological wellbeing. For example, with respect to the first source, moderate amounts of support or volunteer activities offered by the support providers, could contribute to their psychological wellbeing (e.g., reduced depressive symptoms and enhanced wellbeing), whereas giving high amounts of support to the degree of being overwhelmed (physically, mentally, or both) by others' demands are associated with diminished mental health (Post, 2005; Schwartz, Meisenhelder, Ma, & Reed, 2003; Windsor et al., 2008). The more restricted (i.e., less time-flexible and more disruptive to the support providers' schedule) and personal (e.g., feeding and washing the patient vs. buying groceries) the care tasks are, the more likely support providers are to experience emotional problems and caring-related negative consequences, such as burden (Given, Stommel, Collins, & Given, 1990; Nijboer, Triemstra, Tempelaar, Sanderman, & van den Bos, 1999; Northouse & Swain, 1987).

Furthermore, numerous studies have generally acknowledged that support from one's social network reduces support providers' psychological distress (for a review see House, Landis, & Umberson, 1988; Thoits, 1982), irrespective of whether support providers are confronted with additional stressful circumstances or not (Nijboer, Tempelaar, Triemstra, van den Bos, & Sanderman, 2001).

With respect to the third element, i.e., the characteristics of the support provider, the following can be said. Studies on the relation between social demographic factors (e.g., gender, age, providers' social tie with the recipient, and socio-economic status) and support providers' psychological wellbeing have yielded rela-

tively consistent findings, such that being female (Blood & Simpson, 1994; Hagedoorn, Sanderman, Bolks, Tuinstra, & Coyne, 2008; Pinguart & Sorensen, 2006), of younger age (Montgomery, Gonyea, & Hooyman, 1985), being the partner of the recipient (George & Gwyther, 1986), or having a low socio-economic status (Montgomery et al., 1985) is related to higher levels of psychological distress or adverse mental health outcomes.

However, researchers have not focused much on how personality characteristics may shape support providers' psychological wellbeing while helping others. There has been limited exploration of personality characteristics as direct or indirect determinants of support providers' psychological wellbeing. Among studies that did focus on personality and support providers' psychological wellbeing, neuroticism, dispositional optimism, extraversion, and mastery are the personality characteristics that have received the most research attention. For example, in a variety of populations, a number of researchers have found that caregivers scoring low on mastery, optimism, and extraversion, or high on neuroticism report greater mental health problems (e.g., depression) in comparison to their counterparts who are high in mastery, optimism, and extraversion, or low in neuroticism (Bookwala & Schulz, 1998; Bookwala & Schulz, 2000; Hooker, Monahan, Shifren, & Hutchinson, 1992; Hooker, Monahan, Bowman, Frazier, & Shifren, 1998; Koerner, Kenyon D.B., & Shirai, 2009; Kurtz, Kurtz, Given, & Given, 1997; Miller, Campell, Farran, Kaufman, & Davis, 1995; Monahan & Hooker, 1995; Nijboer et al., 2001; Reis, Gold, Gauthier, Anders, & Markiewicz, 1994).

Unmitigated Communion

As the focus of most of the personality and support provider health literature has been on conventional traits, a thorough investigation of other personality characteristics is warranted and will provide a valuable extension of the existing literature. The present thesis focuses on a personality characteristic that is thought to be especially relevant in the effects of providing care or support, i.e., unmitigated communion (UC).

UC is defined as a focus on others to the exclusion of the self (Helgeson & Fritz, 1998). It is likely to be a good candidate for explaining the individual differences in support providers' psychological wellbeing because helping and caring for others is central to UC individuals' self-identity. The typical characteristics of high UC individuals are often described as, for instance, having excessive concern with others, placing others' needs before their own, worrying excessively about others' problems, helping others to their own detriment, and being overly nurturant without accepting anything in return (Helgeson & Fritz, 1999). Thus, maintaining a positive relationship with others and taking care of others is an important aspect of UC individuals' conception of themselves.

UC is relevant in the effects of providing support to others also because of UC individuals' unhealthy focus on others. That is, UC individuals focus excessively on others, feel responsible for others' wellbeing, and tend to ignore their own needs. One of the reasons for UC individuals to subject themselves to the demands of others and to neglect themselves is their tendency to evaluate themselves based on others' opinions (Helgeson, 2003). In other words, one motive of UC individuals to please others by helping them might be that people who received support may feel positive about UC individuals and hence UC individuals may feel good about themselves. Therefore UC might be an important factor in the association between the provision of support and wellbeing.

Outline of This Thesis

The purpose of this thesis is to study the role of UC in contributing to support providers' psychological wellbeing. A series of 5 empirical (sub)studies – with novel instruments, among various support provider groups (i.e., college students and spouses of patients), and with different research designs (i.e., survey studies and an experiment) – were conducted. Moreover, UC's implication on support providers' wellbeing was studied in two different contexts: the context of daily support of college students provided to people close to them and the context of coping with the chronic illness of one's spouse.

To start with, Chapter 2 extensively introduces UC, the key concept of this thesis, and presents a literature review of past research on UC and its relations to psychological wellbeing and other psychological factors. Furthermore, this chapter discusses the reasons to focus on UC and explains how studying UC increases our understanding of support providers' psychological wellbeing.

Next, Chapter 3 and Chapter 4 exclusively focus on the role of UC in daily support provision – a situation in which one is giving support to another person who encounters a daily hassle – and study how UC may alter the association between support providers' supportive behaviour and their psychological wellbeing. Chapter 5 takes a different angle and focuses on the role of UC in spouses' responses to partner's chronic illness – a situation in which the caring role is especially salient to UC individuals. Chapter 5 studies the association between UC and psychological wellbeing in spouses of patients and examines the underlying mechanisms linking the two.

Specifically, Chapter 3 presents two cross-sectional empirical studies to examine the role of UC in support providers' psychological wellbeing in the context of providing support to a close one in the face of daily hassles. It is argued that three cognitive characteristics of UC, namely (a) overinvolvement (i.e., the tendency to become overly involved in others' problems and take others' problem as their own), (b) self-neglect (i.e., the tendency to neglect their own needs and symptoms), and (c) externalised self-evaluation (i.e., the tendency to base their self-evaluation on what others think of them) may predispose individuals high in UC to experience depressive symptoms. Based on these characteristics, Chapter 3 argues and demonstrates that the association between supportive behaviour and psychological wellbeing is a function of the providers' level of UC. Study 3.1 was carried out among 87 female college students. Study 3.2 was carried out among 263 college students. The second study was an attempt to replicate the findings from the first study and extend it by investigating the association between unsupportive behaviour and providers' depressive symptoms.

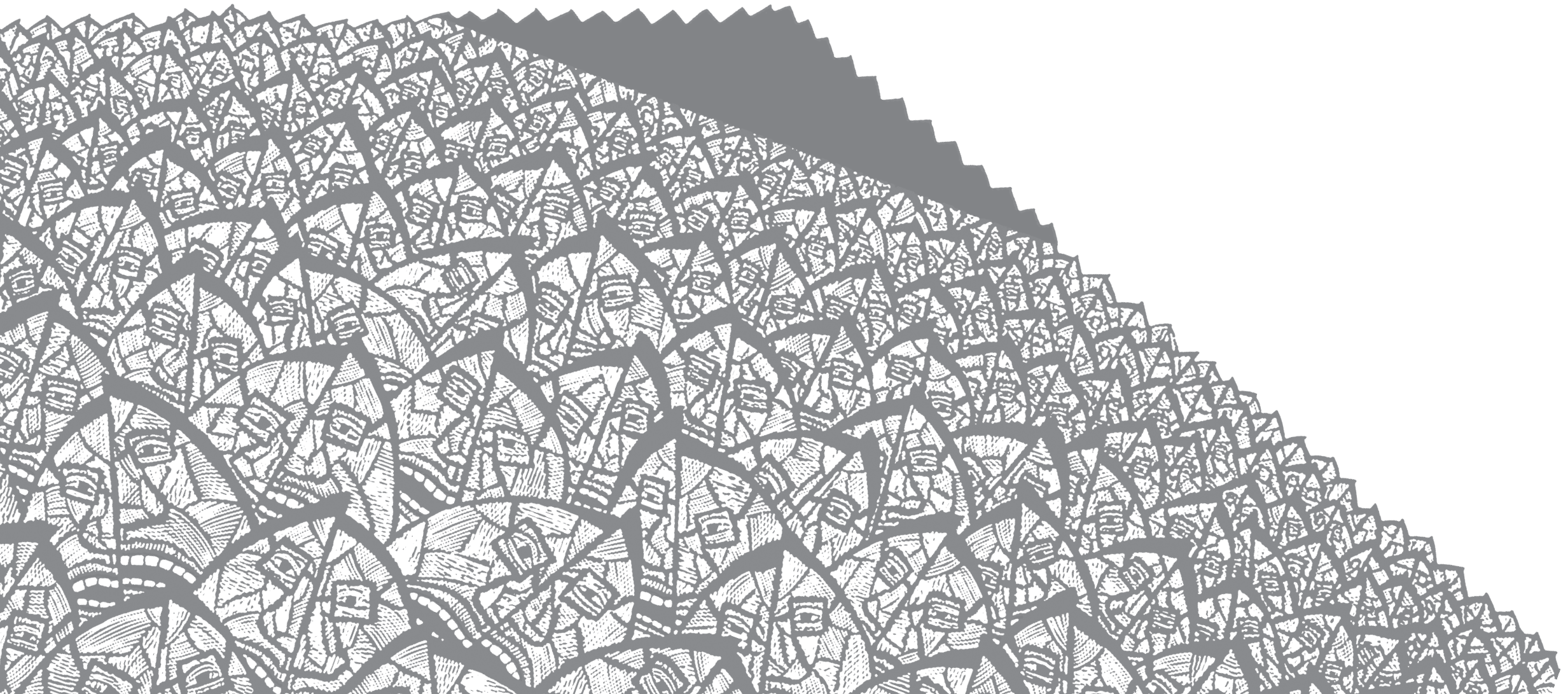
Chapter 4 reports an experimental study (Study 4) which focused on the question of the mechanism through which UC may alter one's psychological wellbeing while giving support to others in a daily supportive situation. Study 4 proposed a mediated moderation model to test the effects of self-evaluative feedback on depressive mood as a function of UC. In addition, this study also examined whether the externalised self-evaluation can explain the moderating effect of UC. College students first completed the UC and externalised self-evaluation measurement pre-test, next they were instructed to imagine themselves helping a friend with a daily task. Self-evaluative feedback was manipulated to unravel whether high UC individuals are more sensitive to negative feedback. Theoretical implications of these findings are discussed.

Chapter 5 examines the role of UC in psychological wellbeing in spouses of patients with end-stage renal disease (ESRD). It also explicitly examines what type of cognitive characteristics that high UC spouses possess could explain their psychological wellbeing in the course of their partner's illness. Across two studies with spouses of dialysis patients (Study 5.1) and spouses of kidney transplant patients (Study 5.2), the link between UC and spousal psychological distress was demonstrated and the underlying mechanisms that may account for such association were examined and discussed.

Finally, Chapter 6 synthesizes the empirical evidence of the contribution of UC to support providers' psychological wellbeing reported in the previous chapters. It also provides a discussion of the theoretical and practical implications and suggestions for further research.

CHAPTER 2

UNMITIGATED COMMUNION IN SUPPORT PROVISION



The goal of this chapter is to summarize earlier findings with respect to unmitigated communion (UC) – the central concept in this thesis – in relation to support provision. This chapter further discusses the reasons to focus on UC and explains how studying UC increases our understanding of support providers' psychological wellbeing.

Definition of Unmitigated Communion

UC is defined as a focus on others to the exclusion of the self (Helgeson & Fritz, 1998). It was developed from two personality dimensions first put forward by Bakan (1966), named communion and agency. The relations between UC, communion and agency are described in Box 2.1 and the results of past research on their associations are summarised in Table 2.1. A person characterized by UC has an extreme orientation towards others causing individuals to become overly involved with others to the detriment of their own wellbeing. This extreme focus on others is thought to make them prone to worse mental and physical health. Based on this definition, the following section first summarizes findings in relation to UC and its psychosocial correlates from two essential facets: the *extreme orientation towards others* and the *lack of orientation towards oneself*.

Furthermore, UC individuals' self-identity is characterized by caring for others. In fact, helping and caring for others is so central to UC people's self-identity that they may strive to maintain positive relationships with others by focusing extremely on others' needs while neglecting their own needs. This third crucial feature of UC, i.e., the *caring role as self-identity* is discussed in the following section. In comparison to the first two aspects of UC (e.g., extreme orientation towards others and the lack of self-focus), the caring role as self-identity has not yet received much attention in past research. The characteristics reflecting these three core features of UC and their relations with UC are summarised in Table 2.2.

Unmitigated Communion and Support Provision

Extreme Orientation Toward Others

UC individuals' extreme orientation toward others is expressed in at least two characteristics, i.e., overinvolvement with others and externalised self-evaluation. Individuals characterized by UC tend to become overly involved in others' problems and take the problem as their own. They seem to ruminate about others' problems and internalize these problems in such a way that others' distress becomes their own distress (Fritz & Helgeson, 1998). The higher the level of UC, the more likely it is that individuals overly engage in others' events and the more strongly they will be affected by others' problems. Previous research has shown that people high in UC reported taking on others' distress in the form of having frequent and intrusive thoughts about the problem and talking about the problems days later (Fritz & Helgeson, 1998; Helgeson & Fritz, 1998; Helgeson & Fritz, 1999). Other studies found that, in comparison to individuals low in UC, high UC individuals were more likely to be affected by negative events occurring to others (Helgeson, 2003a; Helgeson & Fritz, 1998) and tended to feel more responsible for others' problems (Aubé, 2008).

If support providers become overly involved with support recipients, a stressor or problem that occurs to support recipients may be construed by high UC support providers as their own personal event. Hence, although giving support to someone in need is considered to be a positive experience in terms of enhancing support providers' self-esteem and increasing their wellbeing (Burke, 1991; Burke, Stets, & Pirog-Good, 1989; Lubart, 1993; Riley & Burke, 1995; Stets & Burke, 1994), the positive effect of providing support may be counteracted by the intrusiveness of others' problems. This is in line with Kessler's cost of caring hypothesis (Kessler, McLeod, & Wethington, 1985) which asserts that providing support can be distressing if the provider is emotionally overinvolved with the recipient. Providing support to others may consequently have negative implications or a lack of positive implications for providers' psychological wellbeing, especially for those high in UC.

Individuals high in UC also tend to use external standards for self-evaluation (i.e., externalised self-evaluation), meaning that they rely on others for self-esteem (Fritz & Helgeson, 1998; Helgeson & Fritz, 1998). In other words, high UC individuals turn to the external environment to infer their self-worth (Helgeson, 2003b). Studies of adolescents attending a pre-college programme and college students have demonstrated a positive association between UC and judging the self based on others' opinions (Fritz & Helgeson, 1998; Hennig & Walker, 2008). This tendency to use externalised standards for self-evaluation could be detrimental to health because UC has also been found to be associated with the belief that others view the self negatively (Fritz & Helgeson, 1998). It is the combination of socially contingent self-acceptance (i.e., using external indicators of self-evaluation) and perceptions that others view them unfavourably that is likely to cause poor psychological wellbeing among individuals high in UC. For example, research examining psychological wellbeing of college students found that interpersonal stressors, such as expressed tension or disagreement, had a more profound emotional impact on students high in UC relative to students low in UC (Nagurney, 2007; Reynolds et al., 2006). People high in UC can be expected to perceive expressed tension or disagreement with others as disapproval or rejection by others, which may in turn cause psychological distress.

To assure others' approval, individuals high in UC try to please others by helping them. However, exactly because of their strong focus on others' opinions for self-evaluation and the belief that these others think negatively of them, this is unlikely to be successful. The overall negative belief that others view them unfavourably is likely to override the positive effect of high UC people's helping behaviour. Some studies have reported findings that are in line with this speculation. For instance, UC has been found to be positively associated with the desire for others to heed one's advice (Fritz & Helgeson, 1998) and with feeling bad about the self when others explicitly or implicitly reject one's support (Helgeson & Fritz, 1998). In sum, UC has been found to be associated with overinvolvement in others' problems and an externalised self-evaluation (for an overview, see Table 2.2). These characteristics may put individuals at risk for experiencing distress, especially in the context of dealing with others' problems and providing support.

Lack of Orientation Towards Oneself

Another important feature of UC individuals is the lack of orientation towards oneself, reflected in *failure to regard oneself highly* (Helgeson & Fritz, 1998). UC individuals have low regard towards themselves. Previous studies have shown a robust negative link between UC and global self-esteem (Amanatullah, Morris, & Curhan, 2008; Fritz & Helgeson, 1998; Helgeson, 2003b; Helgeson, Escobar, Siminerio, & Becker, 2007) as well as between UC and specific situational self-esteem, such as body image and appearance esteem in cancer patients and diabetic adolescents (Helgeson, 2003b; Helgeson et al., 2007) (see Table 2.2 for detailed information). UC people seem to have not only a pessimistic outlook in general, but also with respect to specific situations. In the light of these findings, one can expect that in a situation where one provides support to another, support providers high in UC may be likely to adopt the belief that they are not very competent to carry out supportive behaviours. It has been known that a lack of competence affects people's emotional states and psychological wellbeing (Bandura, 1977). Feelings that one has the competence to support others can be especially protective against negative outcomes and beneficial for maintaining a good level of psychological wellbeing, whereas feelings of low competency in giving support may add to negative wellbeing (Gilliam & Steffen, 2006; Hagedoorn, Sanderman, Buunk, & Wobbles, 2002; Nijboer et al., 1998; Nijboer et al., 2000; Nijboer, Triemstra, Tempelaar, Sanderman, & van den Bos, 1999).

It is worthy to note that UC individuals' lack of a positive sense of self should not be viewed isolated from the other essential facet stated above, i.e., the extreme orientation towards others. These two facets may influence and reinforce each other. On the one hand, the excessive outward focus has been argued to stem from UC individuals' lack of a positive sense of self so that they place a large focus on others through helping others to mask the fact that they are looking for others' approval to enhance self-esteem. Corresponding to this idea, research has demonstrated that the helping behaviour of people high in UC might not be out of a genuine concern for others' welfare but rather to enhance their own self-worth in the eyes of others (Helgeson & Fritz, 1998). On the other hand, over-reliance on

the social environment for approval may keep high UC individuals from developing a positive self-view (Helgeson & Fritz, 1998). Accordingly, high UC individuals' helping acts are unlikely to attain their goal of enhancing others' views of themselves and subsequently, benefiting their psychological wellbeing.

It is important to point out that as much as over-involvement with others and externalised self-evaluation are not the only two aspects that reflect UC individuals' extreme orientation towards others, low self-esteem is not the only aspect that reflects UC individuals' lack of orientation towards oneself. Researchers have identified some other behavioural characteristics, such as placing others' needs before their own, not being assertive of one's own needs, showing little self-disclosure, and not taking care of one's own health (Buss, 1990; Fritz & Helgeson, 1998; Helgeson & Fritz, 1999). However, examination on these characteristics is beyond the scope of the current thesis. For readers who are interested in the implications of UC for problematic behaviours, Box 2.2 describes this topic in more detail and Table 2.3 presents all relevant findings from a review of the literature.

Based on the overview above, it is reasonable to expect UC to play an important role in regulating one's psychological wellbeing in the time of providing support to other people. However, past research that focuses on this matter is scarce. The question whether support providers' psychological wellbeing would alter as function of individuals' level of UC remains to be answered. Moreover, another unresolved issue is the lack of understanding with respect to the psychological process through which UC is related to support providers' psychological wellbeing. Research in the domain of health has uncovered a number of mechanisms to explain how UC might result in poor health outcomes. For example, researchers have stated that it is the extreme outward focus – reliance on others for esteem and the perception that others evaluate the self unfavourably – that accounts for part of the negative relation between UC and psychological wellbeing (Fritz & Helgeson, 1998). Others have demonstrated several behavioural indicators (e.g., poor health behaviours) that may serve to understand the process in which UC

is linked to negative psychological wellbeing. In light of these findings, the current thesis sought to address two issues in particular. Firstly, whether support recipients' feedback has an impact on support providers' psychological wellbeing depends on providers' UC level. Secondly, whether cognitive indicators related to an extreme outward focus and lack of self-orientation can explain how UC offsets support providers' psychological wellbeing.

Caring Role as Self-identity

Besides the extreme orientation towards others and the lack of self-focus, a key aspect of the conceptualization of UC that has been relatively neglected to date is the caring role as self-identity. Taking care of others appears to be an important aspect of UC individuals' conception of themselves. Previous research has suggested that helping is central to high UC individuals' self-concept (Helgeson & Fritz, 1998) and found that high UC people tend to view themselves as a person who is helpful and potentially important to others (Fritz & Helgeson, 1998). In fact, caring for others is such a core aspect of UC people's self-identity that helping others may have a special meaning for high UC individuals. That is, helping others becomes a way to achieve and maintain the high quality of relationships high UC individuals strive to have with others (Fritz & Helgeson, 1998).

UC individuals exhibit a large emphasis on the maintenance of positive relationships with others. This emphasis seems to be carried to an extreme such that high UC people tend to focus on relationships at the cost of their own needs or desires (Nagurney, 2007). In other words, people high in UC seem to prefer having imbalanced relationships in which they are being needed by other individuals while they do not attend to themselves (e.g., being intrusive, self-neglecting, exploitable, and not expressive of their own needs). UC people have been demonstrated to be involved in one-sided relationships in which they provide aid to others, but do not seem to receive anything in return or do not seem to perceive rewards to be available (Nagurney, 2007). These imbalanced relationships may reaffirm high UC individuals' identity as being helpful and caring towards others, and being needed by others.

Enhancing self-esteem and maintaining positive relationships with others seem to be the two prime motivations guiding UC individuals' helping behaviour rather than simply a greater empathic concern for others. This is particularly relevant because past research has argued that albeit having a caring, other-oriented relational focus could be protective, failing to participate genuinely in relationships is problematic (Jack & Dill, 1992). Moreover, an identity-relevant experience that especially threatens a salient and central part of an individuals' identity may cause distress (Thoits, 1991). In other words, as UC individuals are inclined to failing in adequately supporting others, their identity as helper is likely to be threatened. Taken together, two kinds of situations are particularly risky for high UC individuals, i.e., situations that involve providing support to others and situations that make one's caring role salient. In these situations, individual differences in UC should be able to explain differences in their psychological wellbeing. In fact, research has suggested that individuals high in UC can be expected to be more vulnerable to the distress that accompanies caregiving than those who are low in UC (Helgeson, 1993).

However, we know surprisingly little about how UC affects psychological wellbeing in situations involving support provision or situations that make the caring role salient. Most of the existing literature focused on UC and its implication for psychological wellbeing has been conducted within the context of people dealing with personal problems, such as chronic illnesses. These studies demonstrated positive associations between UC and psychological distress as well as negative associations between UC and emotional wellbeing among various populations, including college students (Aubé, 2008; Bruch, 2002; Fritz & Helgeson, 1998; Ghaed & Gallo, 2006; Helgeson & Fritz, 1999), adolescents (Fritz & Helgeson, 1998; Helgeson et al., 2007; Helgeson, Siminerio, Escobar, & Becker, 2009), healthy adults (Amanatullah et al., 2008; Fritz & Helgeson, 1998), breast cancer patients (Helgeson, 2003b; Piro, Zeldow, Knight, Mytko, & Gradishar, 2001), coronary heart disease patients (Fritz, 2000; Helgeson, 1993; Helgeson & Fritz, 1999), and rheumatoid arthritis patients (Danoff-Burg, Revenson, Trudeau, & Paget, 2004; Trudeau, Danoff-Burg, Revenson, & Paget, 2003) (See Table 2.2 for further

information). Much less attention has been given to the association between UC and psychological wellbeing within the context of facing a problem of somebody else, in particular the context where support provision or one's caring role is salient (i.e., people exposed to situations that involve support provision or provoke their caring role).

To the best of our knowledge, only two experimental studies have investigated whether UC is associated with distress in participants who were exposed to another person's problem, namely by listening to a confederate or a friend talking about a relationship problem (Fritz & Helgeson, 1998). Although researchers in both laboratory settings had specified the problem the confederate or the friend disclosed (e.g., a personal problem with another person) and the relationship between the pair (e.g., stranger or friendship), the topics discussed in both studies were simple, mild, daily problems and therefore participants were by no means exposed to or involved in a distinct caring role. Only in one study of spouse adjustment to a partner's cardiac event, the relation between UC and psychological wellbeing was examined in a context in which one has to deal with important real life problems of a close other. It was found that UC exerted a main effect on spouses' psychological outcomes such that spouses who scored high on UC reported greater psychological distress three months after the hospitalization (Helgeson, 1993). However, this finding is limited by the generalizability of the sample ($N = 56$ women) and the question still remains as to whether the relation between UC and psychological adjustment would be present in other populations of spouses of patients.

Therefore, in this thesis, we focused on spouses whose partners are coping with chronic illness, specifically kidney dialysis and kidney transplantation. By recruiting relatively large and gender balanced samples and utilizing validated measurements, we studied how UC plays a role in spouses' psychological responses to partner's illness.

Conclusion

UC – a focus on others to the exclusion of the self – is a personality characteristic that might be especially relevant in understanding psychological wellbeing the context of providing care and support. Specifically, the three essential features of UC, i.e., the extreme orientation towards others, the lack of orientation towards oneself, and the self-identity as a support provider, may play an important role in understanding the differences in support providers' distress. The next empirical chapters will provide more insight into the role of UC in support providers' distress in the context of providing support to a close one in the face of daily hassles and to a partner with end-stage renal disease.

Box 2.1 *The origins and development of UC*

Agency and Communion

UC was derived from two dimensions of personality, namely agency and communion (Bakan, 1966). These two concepts, as first put forward by Bakan (1966), reflect the desire to be independent with a focus on the self (i.e., agency) versus the desire to be connected to and focused on others (i.e., communion) (Helgeson & Fritz, 1999). Specifically, agency refers to concerns about self-affirmation and individualization. It involves the tendency toward self-protection, self-assertion, self-expansion, self-control and emphasizes the forming of separations. By contrast, communion refers to focuses on group participation and cooperation. It involves nurturance, empathy, attachment, connections, and emphasizes the creation of unions and integration.

Agency and communion play important roles in an individuals' wellbeing. Generally, both traits show positive directions toward health outcomes. Agency has been found to be negatively related to self-criticism, depression, physical symptoms, and positively related to mental health and self-esteem (Helgeson, 2003a; Helgeson & Fritz, 1999; Holahan & Spence, 1980). Communion has been typically found to show positive associations with marital satisfaction, satisfying interpersonal relationships, good health behaviours, and negative associations with loneliness (see Fritz & Helgeson, 1998, for a review) and burnout syndrome in health-care professionals (van Yperen, Buunk, & Schaufeli, 1992).

However, in recent studies, communion in particular has been found to be unrelated to psychological wellbeing. Studies among rheumatoid arthritis patients, college students, and adolescents have reported that communion is neither related to psychological distress (Fritz & Helgeson, 1998; Trudeau et al., 2003), nor to positive and negative affect (Saragovi, Aube, Koestner, & Zuroff, 2002), or depressed mood (Aubé, 2008). Similarly, research on psychosocial adjustment to breast cancer found no association between communion and indicators of psychological wellbeing, such as anxiety and emotional wellbeing (Piro et al., 2001).

It is intriguing for researchers why communal traits, such as caring for and attending to others, appear not to be associated with psychological wellbeing.

The Development of UC

Explanations for the seemingly contradictory findings regarding to the association between communion and social wellbeing (e.g., marital satisfaction) and between communion and psychological wellbeing (e.g., distress) have led to the development of UC. In his work, Bakan (1966) implied that it is important that the agency and communal orientations moderately mitigate each other (e.g., communal orientation should be mitigated by some focus on the self). One without being mitigated by the other can be potentially harmful to an individual and cause negative effects on psychological and physical wellbeing. The term 'unmitigated', hence, is introduced to indicate the extreme of agency and communion. UC is a form of communion in which agency is notably absent (Helgeson & Fritz, 1998). Based on Bakan's theory (1966), Helgeson argued that the inconsistent relations of communion to psychological distress could be due to the failure to disentangle the construct from UC (Helgeson, 1994; Helgeson, 2003a; Helgeson & Fritz, 1998).

UC and Communion

UC is an extreme form of communion. Thus, UC is conceptually related to communion such that both constructs share some traits including being concerned with the needs and feelings of others, being empathetic and supportive toward others, and being warm in relations with others and the world. In fact, UC is often found to be modestly associated with communion in past research (see Table 2.1). However, and more importantly, there are also qualitative differences between UC and communion. By definition, UC reflects a focus on others to the exclusion of the self, whereas communion reflects a positive and caring orientation toward others. UC is distinct from communion across four major domains, i.e., views of the self and others, interpersonal difficulties (i.e., self-neglect, overin-

Box 2.1 The origins and development of UC (continued)

volvement with others), motives for helping, and subsequently psychological distress (Helgeson & Fritz, 1998; Helgeson & Fritz, 1999). Specifically, UC, but not communion, is associated with negative self-view and perceptions that others do not value the self favourably. Communion, by contrast, is associated with positive views of others (Fritz & Helgeson, 1998). Moreover, UC is linked to interpersonal difficulties reflecting subjugating own needs to the needs of others (e.g., difficulty with self-disclosure) and becoming overly involved in taking care of others (e.g., intrusive thoughts about others' problems), whereas communion shows no such associations (Fritz & Helgeson, 1998). Furthermore, high UC individuals help others as a means to enhance their own self-worth in the eyes of others, and thus are concerned with others turning to someone else for help rather than others' needs being met (Helgeson & Fritz, 1998). By contrast, individuals high in communion respond to others' needs out of altruistic motivations (Helgeson & Fritz, 1998; van Yperen, 1996; van Yperen et al., 1992). Consequently, UC, owing to its unique characteristics (e.g., an extreme focus on others, the tendency of being overly involved in others' problems, and taking on others' distress as one's own), appears to negatively affect individuals' wellbeing and is associated with increased psychological distress and poor physical health outcomes, whereas communion is typically unrelated to mental and physical health (Aubé, 2008; Fritz & Helgeson, 1998). More detailed results are presented in Table 2.1.

UC and Sex

UC is introduced as a sex-linked personality trait which is typically found more often in women compared to men (Helgeson, 2003a). However, a review of literature shows rather inconsistent results such that some studies reported no association between UC and sex, whereas others reported weak to modest association between the two indicating higher scores on UC in women (see Table 2.1). To date, the discrepancy between the theorization of UC as sex-related trait and the empirical evidence is not fully clarified. However, it has been suggested that "it is not the case that the majority of women are high in UC...To the contrary, it is a minority of individuals who can be characterized by this trait" (Helgeson, 2003a, p.389).

Box 2.2 UC and maladaptive behaviours

UC individuals exhibit a set of maladaptive behaviours that reflect an overinvolvement with others, including being overly nurturant, being intrusive and controlling (Helgeson, 1993; Helgeson & Fritz, 1998; Helgeson & Fritz, 1999; Helgeson & Fritz, 2000). For instance, in a study among wives of men with prostate cancer, spouses high in UC reported frequently reminding the patients of appropriate health behaviour (Helgeson & Fritz, 1998). Moreover, UC was found to be linked to the belief that the future lies in the hands of others and relinquishing control to others rather than taking control themselves (Helgeson, 2003b). In a study of psychological adjustment in women with breast cancer, UC was found to be positively associated with greater reliance on external control, luck, and fate, but was not found to be related to personal control over the illness (Helgeson, 2003b). These characteristics reflecting an extreme orientation towards others are related to indicators of poor mental and physical health (Helgeson & Fritz, 1998). See Table 2.2 for an overview.

UC has also been demonstrated to be associated with indicators of self-neglect (see Table 2.2). The higher the level of UC, the more likely one would fail to notice, attend to, or prioritize his or her own needs and symptoms (Helgeson, 2003a; Helgeson & Fritz, 1998), the more likely one inhibits self-expression to avoid conflict with others, and the more likely one is exploitable, acting against one's own wishes, and showing self-effacement (Fritz & Helgeson, 1998; Helgeson & Fritz, 1999; Hennig & Walker, 2008). Buss (1990) examined the relation between UC and specific behaviours reflecting dominance and submission. It was found that persons scoring high on UC reported engaging in submissive acts of tolerating insults, humiliation, and scolding without appropriately defending themselves. In addition, UC has been found to be positively associated with poor health behaviours among cardiac patients (Buss, 1990; Fritz, 2000; Fritz & Helgeson, 1998; Helgeson, 1993; Helgeson & Fritz, 1999) and negative indicators of self-care activities such as poor metabolic control, disturbed eating behaviours, and high LDL cholesterol levels among diabetic adolescents (Helgeson et al., 2007; Helgeson et al., 2009). Such neglecting of self represents another cost of caring (cf. Kessler et al., 1985) in that the interference of taking care of others with taking care of oneself may adversely affect support providers' wellbeing. Hence, in high UC individuals, the positive effect of providing support may also be counteracted by the neglect of their own needs.

Table 2.1 Unmitigated Communion and Its Association with Agency, Communion, Unmitigated Agency Traits, and Sex

Variables and studies	Participants	Sex composition	Mean age (range)	Main findings
Agency, Communion, and Unmitigated Agency (UA)				
Trudeau, Danoff-Burg, Revenson, and Paget (2003)	Rheumatoid arthritis patients (N = 158)	127 female 31 male	59 (26-90)	UC was not associated with agency, positively associated with communion ($r = .30, p < .05$), and negatively associated with UA ($r = -.28, p < .05$).
Piro, Zeldow, Knight, Myrko, and Gradishar (2001)	Breast cancer patients (N = 74)	All female	45 (25-89)	UC was negatively associated with agency ($r = -.32, p < .01$), positively associated with communion ($r = .44, p < .001$), and negatively associated with UA ($r = -.32, p < .01$).
Bruch (2002)	College students (N = 189)	94 female 95 male	19	UC was not associated with agency, positively associated with communion ($r = .45, p < .01$), and negatively associated with UA ($r = -.26, p < .01$).
Fritz (2000)	Cardiac patients (N = 65)	20 female 45 male	female: 62 male: 55 (33-75)	UC was not associated with agency, positively associated with communion ($r = .50, p < .001$).
Helgeson, Escobar, Siminerio, and Becker (2007)	Adolescents with diabetes (N = 132) and without diabetes (N = 131)	137 female 126 male	12 (11-14)	UC was positively associated with communion ($r = .51, p < .001$).
Ghaed and Gallo (2006)				
	College students (N = 192)	133 female 59 male	20 (17-42)	UC was not associated with agency, positively associated with communion, $F(1, 182) = 5.21, p < .05$, and negatively associated with UA, $F(1, 182) = 4.40, p < .05$.
Aubé (2008)				
	College students (N = 102)	73 female 29 male	21 (18 - 43)	UC was positively associated with communion ($r = .22, p < .05$).
Fritz and Helgeson (1998)				
	Study 1: Adolescents (N = 69) Study 4: College student (N = 92)	Study 1: 44 female 25 male Study 4: 47 female 45 male	Study 1: 17 (15 - 18) Study 4: --	UC was positively associated with communion ($r = .41, p < .001$, in Study 1; $r = .51, p < .001$, in Study 4).
Helgeson and Fritz (1999)				
	Diverse set of samples, including college students, patients with heart disease, healthy adult, adolescents (N range from 85 to 551)	--	--	UC was negatively associated with agency (except sample 5), positively associated with communion and negatively associated with UA in all six samples.
Helgeson (1993)				
	Cardiac patients and their spouses (N = 56 couples)	56 male patients and 56 female spouses	57 (31-69)	UC was neither associated with agency nor associated with UA in both patients and spouses. UC was positively associated with communion only in spouses ($r = .36, p < .01$).

Table 2.1 Unmitigated Communion and Its Association with Agency, Communion, Unmitigated Agency Traits, and Sex (continued)

Sex					
Bruch, (2002)	College students (N = 189)	94 female 95 male	19	UC was not associated with sex.	
Jin, van Yperen, Sanderman, and Hagedoorn (2010)	College students (N = 263)	206 female 57 male	21 (16-45)	UC was not associated with sex.	
Amanatullah, Morris, and Curhan (2008, Study 1)	MBA students (N = 357)	118 female 239 male	29	UC was associated with sex such that females scored higher than males ($r = .22$, $p < .01$).	
Helgeson, Siminerio, Escobar, and Becker (2009)	Adolescents with diabetes (N = 132)	70 female 62 male	12 (10-14)	UC was not associated with sex.	
Fritz (2000)	People who recently suffered from a first coronary event (N = 65)	20 female 45 male	female: 62 male: 55 (33-75)	UC was not associated with sex.	
Helgeson, Escobar, Siminerio, and Becker (2007)	Adolescents with diabetes (N = 132) and without diabetes (N = 131)	137 female 126 male	12 (11-14)	Females scored higher than males ($r = .18$, $p < .01$).	
Ghaed and Gallo (2006)	College students (N = 192)	133 female 59 male	20 (17-42)	Female scored higher than males, $t(1, 192) = -1.93$, $p < .05$	
Danoff-Burg, Mosher, and Grant (2006)	College students (N = 201)	135 female 66 male	19	Females scored higher than males ($r = .23$, $p < .01$).	
Fritz and Helgeson (1998, Study 1)	Adolescents (N = 69)	44 female 25 male	17 (15-18)	A marginally significant trend for females scoring higher than males, $t(67) = -1.65$, $p < .10$.	

Table 2.2 Summary of Unmitigated Communion and Its Association with Related Constructs

Variables and studies	Participants	Sex composition	Mean age (range)	Main findings
Extreme Orientation Toward Others				
Take others' problem as one's own				
Aubé (2008)	College students (Study 1: N = 102 and Study 3: N = 78)	Study 1: 73 female 29 male Study 3: All female	Study 1: 21 (18-43) Study 3: 19	UC was associated with feeling overly responsible for the welfare of others ($r = .37$, $p < .01$, in Study 1; $r = .30$, $p < .01$, in Study 3). UC was associated with greater difficulty in sharing one's thoughts and feelings with others ($r = .51$, $p < .01$, in Study 1; $r = .31$, $p < .01$, in Study 3).
Fritz and Helgeson (1998, Study 3 and Study 4)	College students (Study 3: N = 43 and Study 4: N = 92)	Study 3: All female Study 4: 47 female 45 male	--	Study 3: UC was associated with intrusive thoughts and frequent thoughts about the confederate's problem 2 days later ($r = .35$, $p < .05$, and $r = .34$, $p < .05$, respectively). Study 4: UC was associated with overinvolvement ($r = .74$, $p < .001$), intrusive thought about the friend's problem 2 days later ($r = .46$, $p < .001$), and frequent thoughts about the friend's problem ($r = .58$, $p < .001$).

Table 2.2 Summary of Unmitigated Communion and Its Association with Related Constructs (continued)

Overinvolvement				
Helgeson and Fritz (1999, Study 4)	Sample 1: college students (N = 57)	11 female 46 male	--	UC was positively associated with overly nurturant ($r = .52, p < .001$) and exploitable ($r = .34, p < .01$).
	Sample 2: College students (N = 92)	47 female 45 male	--	UC was positively associated with being overly nurturant ($r = .68, p < .001$), exploitable ($r = .45, p < .001$), and intrusive ($r = .50, p < .001$).
Externalised self-evaluation				
Hennig and Walker (2008)	College students (N = 111)	--	--	UC was positively associated with relational self-construal ($r = .20, p < .001$) and external self-perception ($r = .30, p < .001$).
Fritz and Helgeson (1998, Study 1 and Study 4)	Study 1: Adolescent (N = 69) Study 4: College student (N = 92)	Study 1: 44 female 25 male Study 4: 47 female 45 male	17 (15-18)	UC was positively associated with externalised self-perception ($r = .56, p < .001$, in Study 1; $r = .43, p < .001$, in Study 4).

Lack of Orientation Towards Oneself				
Self-esteem				
Amanatullah, Morris, and Curhan (2008)	MBA students (N = 357)	118 female 239 male	29	UC was associated with lower self-esteem ($r = -.11, p < .05$).
Helgeson (2003b)	Breast cancer patients (N = 364)	All female	48 (27-75)	UC was associated with low situational specific self-esteem, i.e., body image ($r = -.23, p < .001$).
Helgeson, Escobar, Siminerio, and Becker (2007)	Adolescents with diabetes (N = 132) and without diabetes (N = 131)	137 female 126 male	12.1 (11-14)	UC was associated with low global self-worth ($r = -.18, p < .01$) and low physical appearance related competence ($r = -.14, p < .05$).
Fritz and Helgeson (1998)	Adolescents (N = 69)	44 female 25 male	17 (15-18)	UC was associated with low self-esteem ($r = -.49, p < .001$), poor self-regard ($r = -.54, p < .001$), low self acceptability ($r = -.29, p < .05$), and negative self-view ($r = -.38, p < .001$).
Self-neglect				
Fritz and Helgeson (1998)	College students (N = 92)	47 female 45 male	--	UC was associated with self-neglect (e.g., assertion difficulties, exploitable, and self-silencing) ($r = .33, p < .001$).
Caring Role as Self-identity				
Fritz and Helgeson (1998)	Adult (N = 50)	All female	43 (24-78)	UC was associated with desire for others to heed advice ($r = .34, p < .05$).

Table 2.2 Summary of Unmitigated Communion and Its Association with Related Constructs (continued)

Helgeson and Fritz (1998)	College students (N = 554)	211 female 334 male 9 unknown	UC was associated with feeling bad about the self when others explicitly or implicitly rejected their support ($r = .20, p < .001$), feeling good about the self when being helpful ($r = .17, p < .001$), and feeling bad about the self when being unhelpful ($r = .19, p < .001$).
Psychological Wellbeing			
Positive affect (PA) and negative affect (NA)			
Nagurney (2005)	Fibromyalgia syndrome patients (N = 91)	all female	UC was associated neither with PA ($r = .01$) nor with NA ($r = .18$). UC \times negative event predicted PA ($\beta = -.19, p < .05$) and NA ($\beta = .19, p = .05$).
Nagurney (2007)	College students (N = 97)	63 female 34 male	UC was associated neither with PA ($r = .17$) nor with NA ($r = -.07$).
Bruch (2002)	College students (N = 189)	94 female 95 male	UC was associated neither with PA ($r = .05$) nor with NA ($r = .14$).
Amanatullah, Morris, and Curhan (2008)	MBA students (N = 357)	118 female 239 male	UC was not associated with PA ($r = .05$), but was associated with high NA ($r = .12, p < .05$).
Aubé (2008)	College students (N = 102)	73 female 29 male	UC was associated with low PA ($r = -.33, p < .01$) and marginally associated with NA ($r = .19, p < .10$).

Psychological distress			
Trudeau, Danoff-Burg, Revenson, and Paget (2003)	Rheumatoid arthritis patients (N = 158)	127 female 31 male	UC predicted greater psychological distress (measured by Hopkins Symptom Checklist), $\beta = .49, p < .05$.
Piro, Zeidow, Knight, Mytko, and Gradishar (2001)	Breast cancer patients (N = 74)	All female	UC was associated with greater distress (measured by The Functional Assessment of Cancer Therapy Scale – Breast, FACT), $r = .24, p < .05$.
Bruch (2002)	College students (N = 189)	94 female 95 male	UC was associated with greater dysphoria ($r = .17, p < .05$).
Jin, van Yperen, Sanderman, and Hagedoorn (2010)	College students (Study 1: N = 87 and Study 2: N = 263)	Study 1: female Study 2: 206 female 57 male	UC was associated with more depressive symptoms (Study 1: $r = .23, p < .05$; Study 2: $r = .18, p < .01$).
Helgeson, Escobar, Siminerio, and Becker (2007)	Adolescents with diabetes (N = 132) and without diabetes (N = 131)	137 female 126 male	UC was associated with more depressive symptoms ($r = .13, p < .05$) and higher anxiety ($r = .23, p < .001$).
Danoff-Burg, Revenson, Trudeau, and Paget (2004)	Women with rheumatoid arthritis (N = 127)	--	UC was associated with greater psychological distress ($r = .46, p < .01$).
Fritz and Helgeson (1998)	College students (N = 43)	All female	UC was associated with greater distress ($r = .30, p < .05$).
Helgeson (1993)	Cardiac patients and their spouses (N = 56 couples)	56 male patients and 56 female spouses	UC was a significant predictor of spouses psychological distress ($\beta = -.38, p < .01$).

Table 2.2 Summary of Unmitigated Communion and Its Association with Related Constructs (continued)

Depression					
Nagurney (2007)	College students (N = 97)	63 female 34 male	20 (18-47)	UC was not associated with depression ($r = .04$).	
Helgeson, Siminerio, Escobar, and Becker (2009)	Adolescents with diabetes (N = 132)	70 female 62 male	12 (10-14)	UC was marginally associated with depressive symptoms ($r = .17, p < .10$).	
Fritz (2000)	Cardiac patients (N = 65)	20 female 45 male	female: 62 male: 55 (33-75)	UC was associated with worse mental functioning ($r = -.29, p < .05$), greater depression ($r = .28, p < .05$), and higher anxiety ($r = .26, p < .05$).	
Ghaed and Gallo (2006)	College students (N = 192)	133 female 59 male	19.6 (17-42)	UC was related to greater depression, $F(2, 181) = 5.28, p < .05$.	
Aubé (2008)	College students (N = 102)	73 female 29 male	21 (18-43)	UC was associated with more depressive symptoms ($r = .23, p < .05$).	
Fritz and Helgeson (1998, Study 1 and Study 4)	Study 1: adolescents (N = 69) and Study 4: college students (N = 92)	Study 1: 44 female 25 male Study 4: 47 female 45 male	17 (15-18)	UC was associated with greater depression ($r = .46, p < .001$, in Study 1; $r = -.36, p < .001$, in Study 4).	
Helgeson and Fritz (1999)	Cardiac patients (N = 211)	99 female 112 male	31-80	UC was a significant predictor of greater depression ($\beta = .27, p < .01$) and lower level of well-being ($\beta = -.15, p < .05$).	
Depressive mood					
Helgeson and Fritz (1999)	College students (N = 93)	45 female 43 male	17-38	UC was associated with greater depression ($r = .23, p < .05$) and more depressive experiences, such as dependency ($r = .53, p < .001$) and self-critical experiences ($r = .24, p < .05$).	
Reynolds, Helgeson, Seltman, Janicki, Page-Gould, and Wardle (2006)	College students (N = 41)	29 female 12 male	--	UC did not predict depressive mood on the same day, but predicted more negative mood on the following day while interacting with conflict, $F(1, 202) = 4.09, p < .05$.	
Aubé (2008)	College students (N = 78)	All female	19	UC was associated with greater daily depressed mood ($r = .23, p < .05$).	

Table 2.3 Unmitigated Communion and Its Association with Maladaptive Behaviours and Health Behaviours

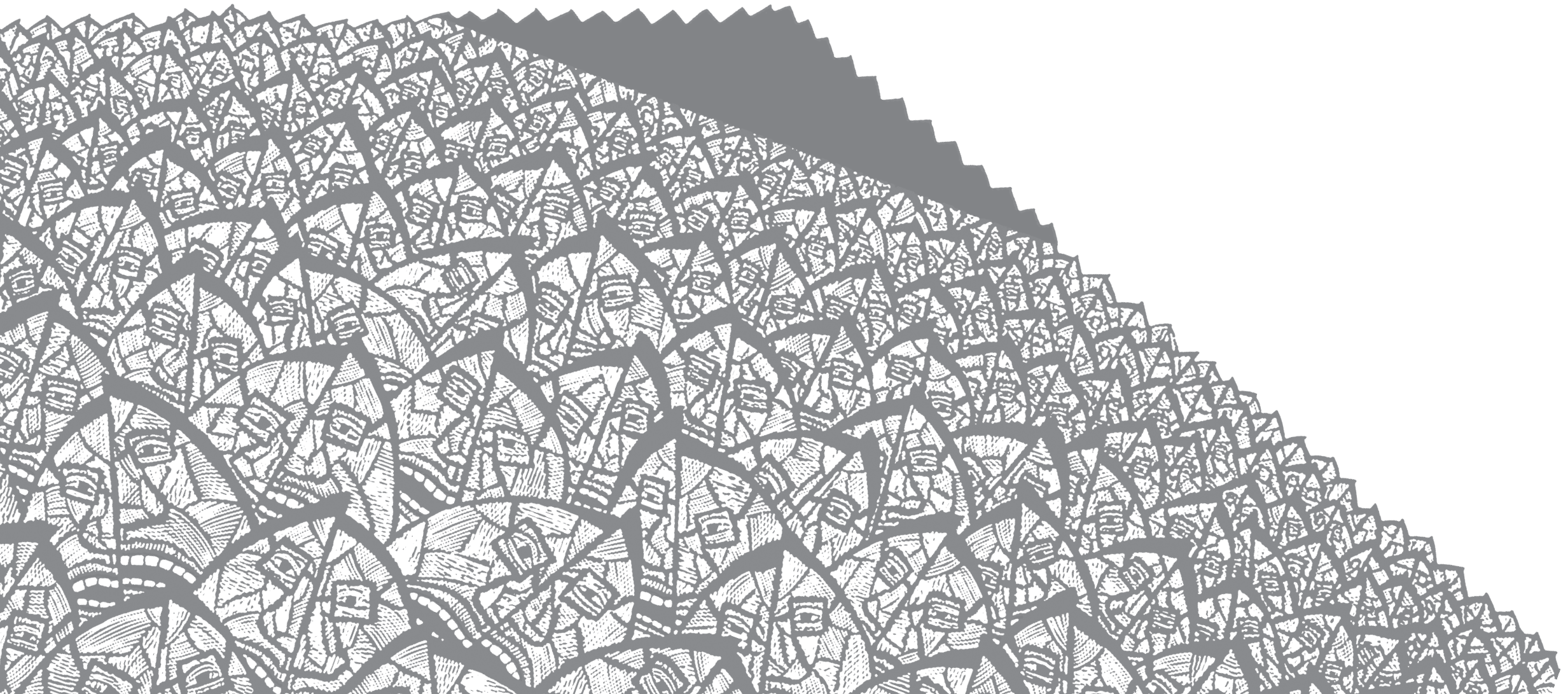
Variables and studies	Participants	Sex composition	Mean age (range)	Main findings
Maladaptive behaviours indicating overinvolvement				
Helgeson (1993)	Cardiac patients and their spouses (N = 56 couples)	56 male patients and 56 female spouses	57 (31-69)	UC was positively associated with spouses overprotective behaviour ($r = .27, p < .05$) and reminding the patient of appropriate health behaviour ($r = .26, p < .05$).
Helgeson and Fritz (2000)	Men with prostate cancer (-)	--	--	UC was associated with reminding patient proper behaviours.
Maladaptive behaviours indicating self-neglect				
Hennig and Walker (2008)	College students (N = 302)	192 female 110 male	--	UC was positively associated with self-sacrificial care ($r = .41, p < .001$), self-silencing ($r = .12, p < .05$), and relationship perfectionism ($r = .27, p < .001$).
Fritz and Helgeson (1998)	Adult (N = 50)	All female	43 (24-78)	UC was associated with low assertion ($r = -.33, p < .05$) and poor self-disclosure ($r = -.41, p < .01$).
Helgeson and Fritz (1999)	College students (N = 57)	11 female 46 male	--	UC was inversely associated with vindictive ($r = -.33, p < .05$) and cold ($r = -.30, p < .05$).
Helgeson and Fritz (2000)				
Helgeson and Fritz (2000)	College students (-)	--	--	When investigating reasons people are reluctant to seek help even when they need it, UC was related to not asking for help because it is a burden to others ($r = .36, p < .001$), and because they believe it annoys other people ($r = .46, p < .001$), and also because they believe that others usually do not want to help ($r = .25, p < .01$).
Helgeson, Siminerio, Escobar, and Becker (2009)	Adolescents with diabetes (N = 132)	70 female 62 male	12 (10-14)	UC was not associated with self-care behaviour.
Helgeson, Escobar, Siminerio, and Becker (2007)	Adolescents with diabetes (N = 132) and without diabetes (N = 131)	137 female 126 male	12 (11-14)	UC was not associated with self-care.
Helgeson and Fritz (2000)	College students (-)	--	--	UC was unrelated to help-seeking behaviours (e.g., visiting to advising offices and seeking for counselling for personal problems or difficulties with classes). UC was associated with a decline in grades between mid-term and finals. The decline in grades was accounted for by overinvolvement with social network. UC was related to difficulties with studies because of helping out friends (e.g., missing classes and not studying because of helping friends) ($r = .34, p < .001$).

Table 2.3 Unmitigated Communion and Its Association with Maladaptive Behaviours and Health Behaviours (continued)

Health behaviour				
Helgeson (2003b)	Breast cancer patients (N = 364)	All female	48 (27-75)	UC was inversely associated with health behaviour ($r = -.22, p < .001$).
Danoff-Burg, Mosher, and Grant (2006)	College students (N = 201)	135 female 66 male	19	UC was not associated with health behaviours (e.g., healthy eating, dental hygiene, active lifestyle).
Helgeson and Fritz (1999)	Cardiac patients (N = 211)	99 female 112 male	31-80	UC was a significant predictor of poor health behaviours ($\theta = -.18, p < .05$).
Fritz (2000)	Cardiac patients (N = 65)	20 female 45 male	female: 62 male: 55 (33-75)	UC predicted less adherence to an exercise regimen over time ($\theta = -1.20, p < .08$).
Helgeson (1993)	Cardiac patients and their spouses (N = 56 couples)	56 male patients and 56 female spouses	57 (31-69)	UC (patients) was associated with not complying with physicians' instruction to reduce household chores ($r = .26, p < .05$).

CHAPTER 3

DEPRESSIVE SYMPTOMS AND UNMITIGATED COMMUNION IN STUDENT SUPPORT PROVIDERS



Supportive actions, such as buying groceries for an ill partner or taking time to talk to a stressed friend, may not only alleviate depression in the person being supported but can also have an impact on the person providing the support. However, compared to the large body of research on depressive symptoms in support recipients, the number of studies of depressive symptoms in support providers is limited. The goal of this research was to gain greater insight into the association between enacted support and depressive symptoms in support providers.

Enacted Support and the Providers' Depressive Symptoms

Providing support to someone in need is typically regarded as a positive experience (Carey, Oberst, McCubbin, & Hughes, 1991; Folkman, Chesney, & Christopherrichards, 1994; Nijboer et al., 1998; Oberst, Thomas, Gass, & Ward S.E., 1989). By giving support to others, providers may enhance their self-image (Riessman, 1965), improve their sense of self-worth (Luks, 1988), and increase their perception of being needed and important (Knoll, Kienle, Bauer, Pffueller, & Luszczynska, 2007). In turn, this may bolster their self-esteem and increase their well-being. In line with this, a number of studies have identified a negative link between enacted support and providers' negative emotions, such as depressive symptoms. For example, studies of couples revealed that partners who gave support to their spouses reported a less negative mood compared to those who did not provide support (Gleason, Iida, Bolger, & Shrout, 2003; Knoll et al., 2007). Similarly, elderly people who supported others reported higher levels of mental health than those who did not provide support (Schwartz, Meisenhelder, Ma, & Reed, 2003). Also studies of community members showed that people who were helpful towards others through volunteer work experienced less distress than those who were not helpful (Hunter & Linn, 1981; Musick & Wilson, 2003; Rietschlin, 1998; Thoits & Hewitt, 2001). However, some exceptions can be found in studies of couples showing a positive association between enacted support and distress if the support recipients were seriously ill (Coyne & Smith, 1991; Ingersoll-Dayton & Raschick, 2004) or if the support was provided over an extended period of time

(Windsor, Anstey, & Rodgers, 2008). Some studies of older adults revealed no direct link between support and depressive symptoms if support was provided through formal organizations or training programs (Brunier, Graydon, Rothman, Sherman, & Liadsky, 2002; Krause, Herzog, & Baker, 1992). Situational factors, such as settings of helping, duration and intensity of care, and the relationship between providers and recipients, may play an important role in explaining differences in the support–depressive symptoms association across studies (Clark & Reis, 1988; Nijboer, Triemstra, Tempelaar, Sanderman, & van den Bos, 1999; Schwartz et al., 2003; Windsor et al., 2008). Despite these differences, we agree with Post’s (2005) overall conclusion that “.. a strong correlation exists between the well-being, happiness, health, and longevity of people who are emotionally and behaviourally compassionate, so long as they are not overwhelmed by helping tasks” (p. 66).

This chapter focuses on individual differences in the strength of the association between enacted support and depressive symptoms *within* populations. In general, providing support to others appears to be associated with lower levels of depressive symptoms in support providers. However, this association may not be evenly distributed within populations; for some people the association may be stronger than for others. We argue and demonstrate that a personality characteristic labelled *unmitigated communion* (UC) plays a moderating role in the association between enacted support and depressive symptoms in support providers. In doing so, we focus on daily enacted support in close relationships.

Unmitigated Communion

UC was developed from two fundamental personality dimensions first put forward by Bakan (1966), namely communion and agency. In their simplest forms, communion represents concerns about interpersonal relationships and reflects a focus on others whereas agency represents concerns about autonomous achievement and reflects a focus on self (Helgeson, 1994). UC is an extreme form of com-

munion not mitigated by agency (Helgeson, 1994; Helgeson, 2003b; Helgeson & Fritz, 1998). Accordingly, two central characteristics of the construct of UC are the tendency to subject oneself to the demands of others and the tendency to neglect oneself. In addition, UC was shown to be distinct from communion in terms of turning to others for self-evaluative information. Together these three characteristics appear to predispose individuals high in UC to experience low self-esteem and high levels of depressive symptoms (Helgeson, 2003b; Helgeson et al., 1998). Based on UC’s characteristics, we will argue that enacted support will be negatively associated with depressive symptoms in low UC but not high UC individuals.

Moderating Role of Unmitigated Communion

Based on the three characteristics of UC described above (overinvolvement in others’ problems, self-neglect, and externalised self-evaluation), we describe three reasons to expect that UC may modify the association between support provision and providers’ depressive symptoms.

Overinvolvement

One key characteristic of UC individuals is that they tend to become overly involved in others’ problems and take others’ problems as their own. According to Kessler’s cost of caring hypothesis (1985), providing support may be distressing if the provider is emotionally overinvolved with the recipient. Specifically, if a provider becomes overly involved with others, a stressor or problem that occurs to someone else may be construed by high UC individuals as their own personal event. The higher the level of UC, the more likely it is that individuals overly engage in others’ events and the more strongly they will be affected by others’ problems. Indeed, a robust positive association exists between UC and negative adjustment indicators such as feeling too responsible for helping another person and having intrusive and frequent thoughts about others’ problems (Aubé, 2008; Fritz & Helgeson, 1998; Helgeson & Fritz, 1999). Moreover, high UC individuals ap-

pear to be more strongly influenced by stressful events that occur to others than individuals low in UC (Helgeson, 2003b; Helgeson et al., 1998). Taken together, in high UC individuals, the positive effect of providing support may be counteracted by the intrusiveness of others' problems. Therefore, we expected support provision not to be associated with depressive symptoms in high UC individuals. By contrast, low UC individuals are less inclined to take others' problems as their own. Hence, among support providers low in UC, we expected support provision to be negatively correlated with depressive symptoms.

Self-neglect

The second reason to expect that UC may modify the association between support provision and providers' depressive symptoms is drawn from another feature of UC, namely self-neglect. The more individuals are characterized by UC, the stronger they feel responsible for others' needs and the more likely they fail to notice, attend to, or prioritize their own needs and symptoms (Helgeson, 2003b; Helgeson et al., 1998). Indeed, several studies have shown positive associations between UC and indicators of self-neglect, such as difficulties asserting one's needs, being exploitable, inhibiting self-expression to avoid conflict with others, acting against one's wishes, and self-effacement (Buss, 1990; Fritz et al., 1998; Helgeson et al., 1999). Furthermore, UC was found to be associated with a lack of self-care activities, including poor health behaviour in cardiac patients (Fritz, 2000; Helgeson et al., 1999) and in women with breast cancer (Helgeson, 2003a), and missing classes and not studying enough because of helping a friend in college students (Helgeson & Fritz, 2000). Such neglecting of self represents another cost of caring (cf. Kessler), in that the interference of taking care of others with taking care of oneself may adversely affect support providers. Hence, in high UC individuals, the positive effect of providing support may also be counteracted by the neglect of their own needs. In other words, this process too leads to the expectation of support provision to be unrelated to depressive symptoms in high UC individuals. Again, we expected providing support to be negatively correlated with depressive symptoms in support providers low in UC because low UC individuals do not tend to neglect their own needs while helping others.

Externalised Self-evaluation

The third reason to expect the moderating role of UC bears in its cognitive features that are key to self-esteem. As mentioned above, UC has been found to be characterized by relatively low esteem of the self (e.g., Fritz, 2000; Fritz et al., 1998; Helgeson, 2003b; Helgeson et al., 1998, for a review see Helgeson, 1994). According to Helgeson (2003b; 1998), this lack of a positive sense of self stems from UC persons' tendency to base their self-evaluation on what others think of them (labelled externalised self-perception by Jack and Dill, 1992). Indeed, studies of adolescents attending a pre-college programme and undergraduate students have provided empirical evidence indicating that UC was associated with judging the self against others' opinions (Fritz et al., 1998; Hennig & Walker, 2008). Such use of externalised standards for self-evaluation is especially troublesome because UC is also related to the belief that others view the self negatively (Fritz et al., 1998). The combination of an externalised self-evaluation and the belief that others hold negative opinions of the self may make individuals characterized by UC vulnerable to low self-esteem and subsequent depressive symptoms. For example, negative events within one's personal relationships had more emotional impact on individuals high in UC relative to individuals low in UC (Nagurney, 2008; Reynolds et al., 2006). Such events (e.g., being criticized by a friend) can be interpreted as disapproval and rejection of the self, and thus confirm the idea that one is perceived negatively by others. This can be expected to cause depressive symptoms especially in those who use others' opinions for self-evaluation (i.e., high UC individuals).

Individuals high in UC may view their helping behaviour as a way to enhance others' views of themselves (Helgeson, 1994). However, exactly because of their strong focus on others' opinions for self-evaluation and the belief that these others think negatively of them, this is unlikely to be successful. Our argument draws a parallel with the sentiment override process proposed with respect to the interpretation of spousal behaviour (Weiss, 1980). That is, the interpretation of the behaviour of one's partner depends on one's global affection or disaffection for him or her, rather than the partner's objective behaviour (For example, see

Hawkins, Carrere, & Gottman, 2002). In a similar vein, high UC individuals' positive supportive behaviour may have little success in increasing their self-esteem, and subsequently, in decreasing their depressive symptoms, because their overall belief that others think negatively of them will override the positive effect of their support provision. Even though a supportive act may initially reduce depressive symptoms, this is not expected to have a long lasting effect. As Helgeson (1994) has put it "...the unmitigated communion individual is engaged in a struggle to increase self-esteem through relationships; because their expectations are so high, however, their goals are unattainable, and self-esteem remains low" (p. 425). Individuals low in UC, who by definition are not focused so much on the opinions of others, will focus more on internal standards of evaluation. Phrased differently, they will be inclined to judge themselves on the basis of their own behaviour rather than on what others think of them. For them, doing something good for others (i.e., supporting others) signals that they are a nice and social person. In sum, only among low UC individuals, providing support was hypothesized to be negatively related to depressive symptoms.

Study 3.1

Based on the rationale outlined above, Study 3.1 was designed to test the hypothesis that enacted supportive behaviour is negatively correlated with depressive symptoms among providers low in UC, but not among providers high in UC. These latter providers were hypothesized to report relatively high levels of depressive symptoms irrespective of their levels of enacted support.

Method

Participants and Procedure

The participants were 87 female first-year psychology students from the University of Groningen, the Netherlands. They took part in this study in exchange for a course credit. The ages of the participants ranged from 18 to 26, with an average of 19.59 ($SD = 1.63$).

Measurements

UC was measured with the revised Unmitigated Communion Scale (Helgeson et al., 1998). Examples are 'I often worry about others' problems' and 'I always place the needs of others above my own'. The nine items were answered on a five-point scale ranging from 1 ('strongly disagree') to 5 ('strongly agree'). A single index was computed by averaging nine items within subjects, with higher scores reflecting a higher degree of UC (Cronbach's $\alpha = .74$).

Enacted supportive behaviour was measured with the subscale Interaction of the Social Support List. Previous studies supported the validity and reliability of this instrument (Hagedoorn, Sanderman, Buunk, & Wobbles, 2002; van Sonderen, 1993). Participants were asked to think of a loved one (i.e., partner, friend, or family member) and indicate how often they provided support to that person. Items for support provision followed the general stem 'How often do you . . .'. Examples of items are ' . . . provide attention to him/her' and ' . . . provide information and advice to him/her'. The six items were answered on scales ranging from 1 ('rarely or never') to 4 ('very often'). The scores were summed and averaged within participants into a single index, with a higher score indicating a higher frequency of supportive behaviour (Cronbach's $\alpha = .77$).

Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D, Radloff, 1977; Schroevers, Sanderman, van Sonderen, & Ranchor, 2000). The CES-D consists of twenty self-report items measuring the frequency of depressive symptoms, has good psychometric properties and is widely used in studies of community samples (Shafer, 2006). Each item was completed on a four-point scale ranging from 0 ('rarely or never') to 3 ('almost always'). Examples are 'Last week, I felt afraid' and 'Last week, I felt lonely'. Item scores were summed within subjects into a single index, with a higher score indicating a higher level of depressive symptoms. In the current sample, the scale demonstrates good internal consistency (Cronbach's $\alpha = .92$).

Results

Means, standard deviations, and correlations are presented in Table 3.1. The mean scores for UC and depressive symptoms were modest and comparable to previous studies of first-year higher education students (Beck, Taylor, & Robbins, 2003; Fritz et al., 1998; Nagurney, 2007). Only UC was significantly related to depressive symptoms ($r = .23$). Specifically, the higher the UC, the more depressive symptoms the participants reported. Enacted supportive behaviour was neither associated with provider depressive symptoms nor with UC.

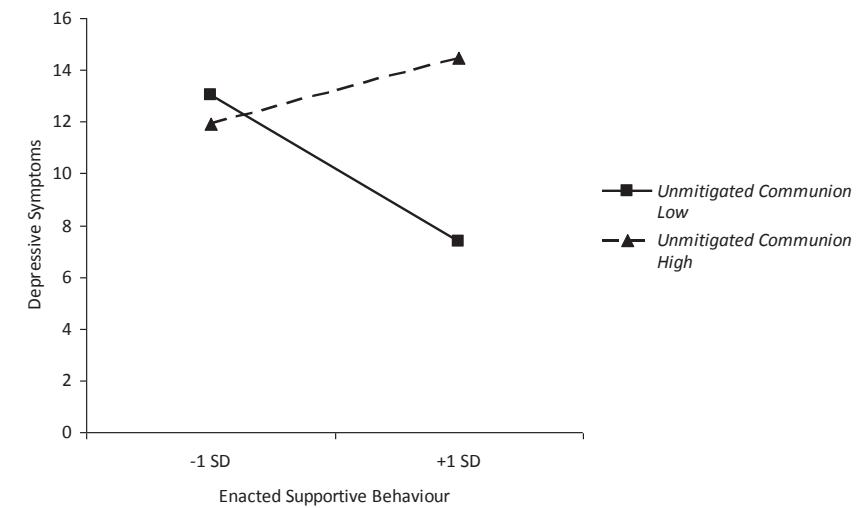
Table 3.1 Means, Standard Deviations, and Correlations ($N = 87$)

Variables	Mean	SD	1	2	3	4
1. Age	19.59	1.63	--			
2. Unmitigated Communion	3.30	.56	.15	--		
3. Enacted Supportive Behaviour	3.25	.45	.16	.15	--	
4. Depressive Symptoms	12.00	8.89	.16	.23*	-.04	--

* $p < .05$

Hierarchical regression analysis with depressive symptoms regressed on UC, enacted supportive behaviour and their interaction was applied to test the hypothesis that enacted supportive behaviour is negatively associated with depressive symptoms only among providers low in UC. To avoid multicollinearity between the predictors and the interaction terms, we centred the predictor variables around zero and multiplied them to form the interaction term (Aiken & West, 1991).

Figure 3.1 Interactive Effect of UC and Enacted Supportive Behaviour on Depressive Symptoms.



The results of the regression analysis are presented in Table 3.2. The initially significant main effect of UC (see also Table 3.1) was qualified by the significant interaction of UC and enacted supportive behaviour. In order to understand how the support–depressive symptoms relationship varies from high UC to low UC, we plotted the interaction. Specifically, as suggested by Aiken and West (1991), simple regression lines of the interaction at two different levels of UC were drawn—one standard deviation above and one standard deviation below the mean—and the statistical significance of the separate slopes was calculated. The significant interaction effect of UC and enacted supportive behaviour on depressive symptoms is plotted in Figure 3.1. As indicated by the simple slopes, the link between supportive behaviour and depressive symptoms was significant if the providers were low in UC ($B = -6.24, p = .05$). By contrast, among providers high in UC, supportive behaviour and depressive symptoms were unrelated ($B = 2.75, p = .36$). As hypothesized, only among low UC individuals, providing support was negatively related to depressive symptoms.

Table 3.2 Multiple Regression of Depressive Symptoms on Enacted Supportive Behaviour (N = 87)

		Depressive Symptoms			
		ΔR^2	ΔF	B^a	SE
Step 1	UC	.06	2.61	2.68	1.77
	Enacted Supportive Behaviour			-1.74	2.06
Step 2	UC × Enacted Supportive Behaviour	.04	3.95*	8.04*	4.05

* $p < .05$

^a The unstandardized regression weights concern the analysis in which all main and interaction effects were entered.

Additional tests examining the differences between predicted values of depressive symptoms showed that when the amount of enacted support was high, depressive symptoms were significantly lower in low UC individuals than in high UC individuals ($B = 6.34, p < .01$), whereas no significant difference between low and high UC individuals was observed in the case of low enacted support ($B = -.97, p = .74$).

In sum, we found enacted supportive behaviour to be negatively associated with depressive symptoms in providers low in UC. By contrast, providers high in UC reported relatively high levels of depressive symptoms, regardless of how much support they had provided.

Study 3.2

The results of Study 3.1 are consistent with the idea that for high UC individuals, the act of providing support is insufficient to reduce their depressive symptoms,

probably because high levels of UC override the positive feeling of doing something good. Individuals high in UC are characterized by overinvolvement in others' problems and neglect of oneself. In addition, individuals high in UC tend to use the opinions of others for self-evaluation and have a pessimistic outlook in that they believe that others do not regard them favourably (Fritz, Nagurney, & Helgeson, 2003). We reasoned that these three characteristics (overinvolvement in others' problems, self-neglect, and an externalised self-evaluation) may result in relatively high levels of depressive symptoms regardless of the amount of support high UC people provide. In other words, deprive them from the benefit of helping. Although most individuals tend to help those close to them in times of stress, rather than acting supportively, individuals can act unsupportively with the best intentions. For example, they may be critical or demanding, try to avoid dispute, or minimize a problem (Dakof & Taylor, 1990). Previous studies among partners of patients with a chronic disease have demonstrated a positive link between unsupportive behaviour (e.g. hiding worries or denying concerns, being critical) and providers' depressive symptoms (Coyne et al., 1991; Hinnen, Hagedoorn, Sanderman, & Ranchor, 2007; Suls, Green, Rose, Lounsbury, & Gordon, 1997).

The goal of Study 3.2 was two-fold. First, we aimed to replicate the finding of Study 3.1 showing that UC moderates the link between enacted supportive behaviour and depressive symptoms. The second aim was to provide more insight into the association between enacted *unsupportive* behaviour and depressive symptoms, and the role of UC in this association.

In contrast to support provision, which is thought to be associated with both rewards and costs (Kessler, McLeod, & Wethington, 1985), acting *unsupportively* may be primarily associated with costs (e.g., feeling bad that one has treated someone unfairly or has been hostile). Accordingly, acting *unsupportively* may be positively associated with depressive symptoms. However, the positive association between enacted *unsupportive* behaviour and depressive symptoms may exist only among low UC individuals. In contrast, high UC individuals are char-

acterized by overinvolvement in others' problems, self-neglect, and externalised self-evaluation. As shown in Study 3.1, they tend to experience relatively high levels of depressive symptoms, regardless of the supportive behaviour they provide. Similarly, enacting *unsupportive* behaviour may not affect depressive symptoms among these individuals. Specifically, we argue that it is their overinvolvement in others' problems, self-neglect, and an externalised self-evaluation rather than their supportive or unsupportive acts that determine their levels of depressive symptoms. Accordingly, we hypothesized that enacted unsupportive behaviour is positively related to depressive symptoms only among providers low in UC.

Finally, UC was traditionally introduced as a gender-related personality characteristic (Helgeson, 2003b; Helgeson et al., 1998). Although the literature is not entirely consistent, a number of studies have indeed reported sex differences in UC (Amanatullah et al., 2008; Helgeson et al., 2007; Hirokawa et al., 2007; exceptions are Bruch, 2002; Helgeson et al., 2009). Since the moderating effect of UC obtained in Study 3.1 was based on a sample including only women, we did not anticipate the moderator effect of UC to be the result of sex differences. Nevertheless, Study 3.2 includes both male and female participants, and therefore, we will examine the role of sex.

Method

Participants and Procedure

Information about the study was posted on the university information boards and the University of Groningen intranet. Students willing to participate could access the online questionnaires by using their student accounts. In return, one out of 25 participants would win a EUR 15 gift voucher. A total of 263 students (206 women and 57 men) completed the online questionnaires, with an average age of 21.36 ($SD = 2.90$, range 16–45). About 26% of the participants were students at the Faculty of Medicine, 24% at the Faculty of Behavioural and Social Sciences, about 23% at the Faculty of Arts and Law, 16% at the Faculty of Management and Business and about 10% at the Faculty of Mathematics and the Natural Sciences.

Most participants were undergraduate students (75.3%), the rest were graduate students (24.7%).

Measurements

UC (Cronbach's $\alpha = .72$), enacted supportive behaviour (Cronbach's $\alpha = .79$) and depressive symptoms (Cronbach's $\alpha = .85$) were assessed using the same questionnaires as those used in Study 1. Enacted unsupportive behaviour was measured with another subscale of the Social Support List, i.e. SSL – Negative (Hagedoorn et al., 2002; van Sonderen, 1993). Participants were asked to think of someone close to them (the same individual when responding to the provision of support) and indicate how often they engaged in unsupportive reactions towards this person. Items were, for example 'act distant to him/her' and 'make disapproving remarks to him/her'. The seven items were answered on scales ranging from 1 ('rarely or never') to 4 ('very often'). The scores were summed and averaged within subjects into a single index, with a higher score indicating a higher frequency of enacted unsupportive behaviour (Cronbach's $\alpha = .65$).

Results

The participants' mean scores for UC, enacted supportive and unsupportive behaviour, and depressive symptoms are presented in Table 3.3. The mean levels of UC and depressive symptoms were comparable to those found in Study 3.1 and other previous studies using student samples (Carton, Kessler, & Pape, 1999; Fritz et al., 1998; Morrison & O'Connor, 2005; Nagurney, 2007; Seidlitz, Fujita, & Duberstein, 2000). As in Study 3.1, UC was positively related to depressive symptoms ($r = .18$), whereas enacted supportive behaviour did not show a significant correlation with depressive symptoms. Furthermore, consistent with earlier studies (Coyne et al., 1991; Suls et al., 1997), enacted unsupportive behaviour was positively associated with depressive symptoms ($r = .15$).

Table 3.3 Correlations, Means and Standard Deviations(N = 263)

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Age	21.36	2.90	--							
2. Sex	-.57	.83	.03	--						
3. Education Level	1.34	.65	.38***	-.01	--					
4. Study Domain	1.84	.71	.12	.00	-.14*	--				
5. Unmitigated Communion	3.20	.58	-.12*	-.08	.01	-.10	--			
6. Enacted Supportive Behaviour	3.15	.49	.13*	-.20**	.12	.05	.16*	--		
7. Enacted Unsupportive Behaviour	1.51	.33	-.01	-.02	.00	.08	.10	.03	--	
8. Depressive Symptoms	10.38	7.90	.06	-.08	-.08	.08	.18**	-.02	.15*	--

* $p < .05$; ** $p < .01$; *** $p < .001$

Age was positively associated with supportive behaviour ($r = .13$) and negatively associated with UC ($r = -.12$). Sex was associated with enacted supportive behaviour ($r = -.20$), indicating that women were more likely to help others than men. There were no associations between sex and the other study variables (i.e., UC, enacted unsupportive behaviour, and depressive symptoms). Furthermore, none of the study variables showed significant associations with educational level (undergraduate level vs. graduate level) or study domain (nature science vs. social science).

A multiple regression analysis was executed to test whether UC moderates the associations between supportive and unsupportive behaviour and depressive symptoms. Given the possibility that sex might account for the function of UC in the support–depressive symptoms association, we conducted a preliminary analysis testing two-way interactions between sex and (un)supportive behaviour. In a second preliminary analysis, sex was included as a second moderator in addition

to UC. None of the two and three-way interactions including sex were significant, nor was the main effect of sex. Hence, sex was excluded in the final regression analysis presented here. We entered UC, supportive and unsupportive behaviour in the first step and the two-way interactions between UC and (un)supportive behaviour in the second step. Additional analyses were conducted to test the statistical significance of the simple slopes.

Table 3.4 Multiple Regression of Depressive Symptoms on Enacted Supportive Behaviour, Enacted Unsupportive behaviour (N = 263)

		Depressive Symptoms			
		ΔR^2	ΔF	B^a	SE
Step 1	Unmitigated Communion (UC)	.05	4.50	1.94*	.83
	Enacted Supportive Behaviour			-.84	.96
	Enacted Unsupportive Behaviour			3.11*	1.43
Step 2	UC × Enacted Supportive Behaviour	.05	7.34	4.02*	1.74
	UC × Enacted Unsupportive Behaviour			-8.63**	2.56

* $p < .05$; ** $p < .01$

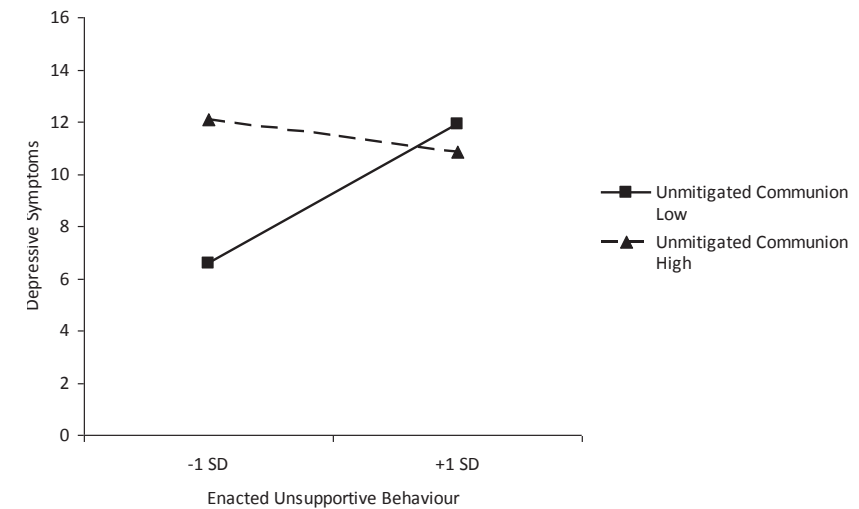
^a The unstandardized regression weights concern the analysis in which all main and interaction effects were entered.

As shown in Table 3.4, both the main effects, and more importantly, the two-way interactions between UC and (un)supportive behaviour were found to be significant. Consistent with Study 3.1, UC interacted with enacted supportive behaviour in association with support providers’ depressive symptoms. The plot was very similar to the one observed in Study 3.1 (see Figure 3.1). Specifically, the link between supportive behaviour and depressive symptoms was significant among low UC providers ($B = -3.16$, $p = .02$), whereas supportive behaviour and depressive

symptoms were unrelated ($B = 1.47, p = .29$) for providers high in UC. In other words, enacted supportive behaviour was negatively associated with depressive symptoms only among providers low in UC. Moreover, additional tests examining the differences between predicted values of depressive symptoms showed that when the amount of enacted support was high, depressive symptoms were significantly lower in low UC individuals than in high UC individuals ($B = 3.92, p < .01$), whereas no significant difference between low and high UC individuals was observed in the case of low enacted support ($B = -.05, p = .97$).

Furthermore, the interaction between UC and enacted unsupportive behaviour was significant in which enacted unsupportive behaviour is positively associated with depressive symptoms only among providers low in UC. As displayed in Figure 3.2, the association between enacted unsupportive behaviour and depressive symptoms was significant if support providers scored low on UC ($B = 8.08, p < .01$), but was not significant if they scored high on UC ($B = -1.87, p = .37$). Furthermore, when the amount of enacted unsupportive behaviour was low, depressive symptoms were significantly lower among low UC individuals than in high UC individuals ($B = 4.77, p < .01$). No significant difference in terms of depressive symptoms between individuals low and high in UC was observed when the amount of enacted unsupportive behaviour was high ($B = -.89, p = .47$). Therefore, depressive symptoms were particularly low among providers low in UC who reported relatively little unsupportive behaviour.

Figure 3.2 Interactive Effect of Unmitigated Communion and Enacted Unsupportive Behaviour on Depressive Symptoms ($N = 263$)



General Discussion

The goal of this research was to gain more insight into the association between enacted supportive and unsupportive behaviour and the providers' depressive symptoms by examining the moderating role of UC. Earlier studies found that supporting others was negatively associated with providers' depressive symptoms and negative mood (Gleason et al., 2003; Knoll et al., 2007; Riessman, 1965), whereas acting unsupportively to a loved one was associated with more depressive symptoms and greater distress (Coyne et al., 1991; Lakey, Tardiff, & Drew, 1994; Suls et al., 1997). The present research extends these findings by showing that UC shapes the association between enacted supportive and unsupportive behaviours and the providers' depressive symptoms. Specifically, we found that among individuals low in UC, giving support or refraining from unsupportive behaviour was associated with less depressive symptoms. In contrast, high UC individuals tended to have high levels of depressive symptoms regardless of enacting supportive or unsupportive behaviour.

We have discussed three reasons why UC may modify the association between enacting (un)supportive behaviour and providers' depressive symptoms that are based on the three features of UC (overinvolvement in others' problems, self-neglect, and an externalised self-evaluation). It is premature to draw conclusions on the plausibility of each of these three explanations, but we believe our reasoning is a good starting point for future studies to examine the underlying mechanisms of the moderating role of UC.

In addition to the main findings, it is also worth noting that UC was positively associated with depressive symptoms in both studies. These findings are consistent with previous literature showing that individuals high in UC reported greater distress and more depressive symptoms than those low in UC (Aubé, 2008; Bruch, 2002; Fritz et al., 1998; Helgeson et al., 1999; Trudeau, Danoff-Burg, Revenson, & Paget, 2003). Moreover, our studies revealed that the correlation between UC and enacted support was weak at most. Similar results have been reported by others (Fritz et al., 2003; Helgeson et al., 1999). Although UC was conceptualized as an extreme focus on others and was associated with providing support to an ill spouse just discharged from hospital after a first coronary event (Helgeson, 1993), it appears that people high and low in UC do not differ from each other in terms of daily supportive actions. Another possible reason for the weak UC–support relation may be that high versus low UC participants assign different meanings to the answer alternatives of the supportive behaviour scale. For instance, “very often” may mean a few times of support to someone low in UC, whereas high UC individuals may have a very high threshold for indicating this answer alternative. The different interpretations could affect participants' responses and consequently the correlation between UC and enacted supportive behaviour. Relatedly, the perceived provided support may not necessarily be in agreement with participants' actual actions. Therefore, if individuals high in UC who actually provided a great amount of support only reported to be modestly supportive to others, the positive association between UC and support could well be weakened.

To be able to evaluate the relevance of the present findings, some limitations are worth mentioning. First, due to the cross-sectional design, we cannot conclude whether enacted supportive or unsupportive behaviour affects providers' depressive symptoms or vice versa; our data do not allow any causal conclusions. We reasoned that enacted supportive behaviour protects low UC individuals from stress, whereas enacted unsupportive behaviour causes stress in low UC individual. Although the findings are consistent with such a causal model, our data can not provide empirical proof of causality. Second, this study used self-reports for all variables included, thus questions could be raised regarding self-report bias. However, in one study, self and peer reports and diary self-reports did not show differences in UC (Aubé, 2008). Given the fact that self-reported support sometimes does differ from observer-reported support (Bolger, Zuckerman, & Kessler, 2000; Dunkel-Schetter, Blasband, Feinstein, & Bennett, 1992), future research rating behaviour by independent observers could further increase confidence in our findings. Third, the present research was conducted with college students which may limit the generalizability of the pattern of associations found across two studies to older adult samples. Finally, the sample of Study 3.1 consisted of women only and the majority of the participants in Study 3.2 was female. Therefore, we can not provide a definite answer with respect to the role of sex.

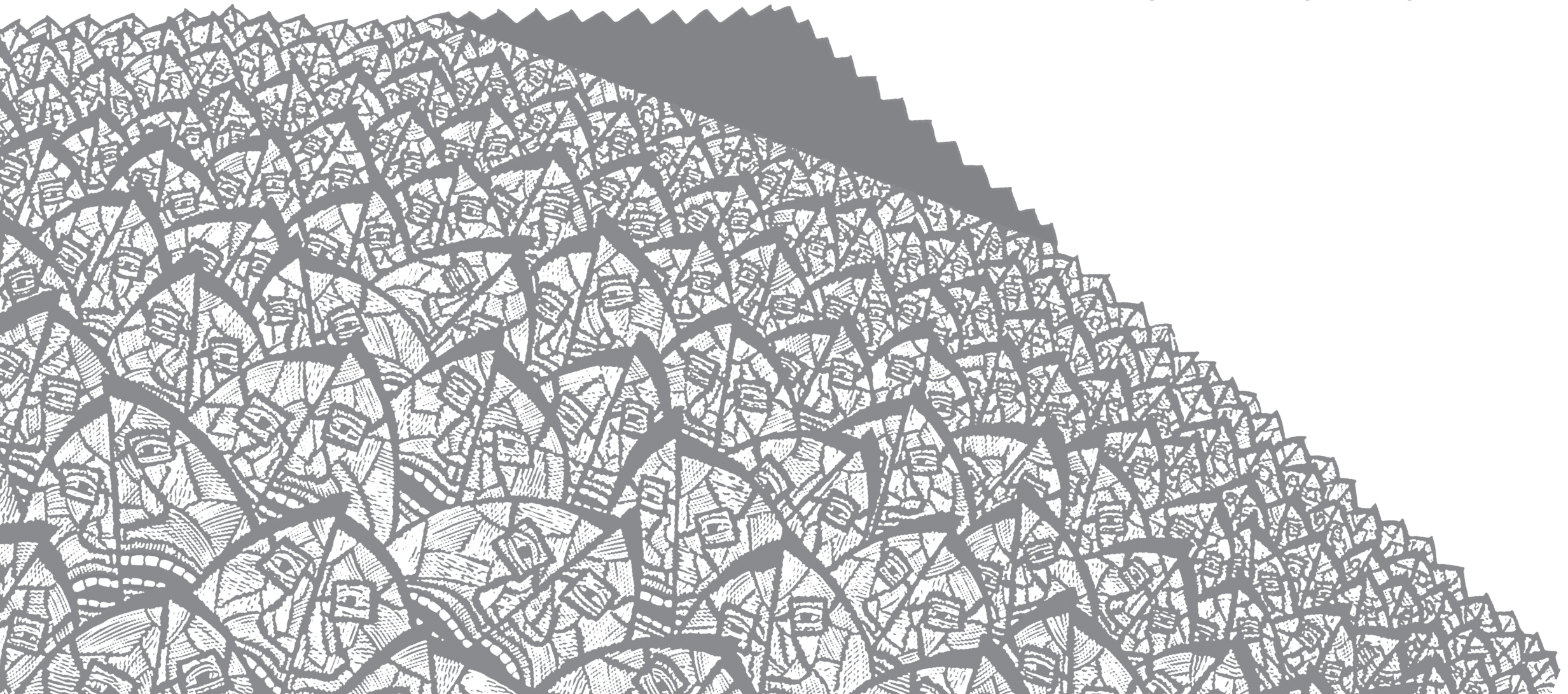
Overall, the present research demonstrates that associations between enacted supportive and unsupportive behaviour and depressive symptoms are dependent on the providers' levels of UC. Our study is the first to examine the role of UC in the enacted support–depressive symptoms association. Although interpretation of these results may be limited because of their correlational nature, we consider this an important first step. Below we discuss a number of suggestions for future research to increase our understanding of this issue further.

First, we theorized that (un)supportive behaviour would affect depressive symptoms in low UC individuals. However, the causal relationship could also be reversed (Moore, Underwood, & Rosenhan, 1973; Underwood, Froming, & Moore, 1977). An experimental design would provide more insight in the direction of cau-

sality of the link between support provision and providers' wellbeing as a function of UC. Secondly, we conducted the research in the context of young adults providing daily support (giving advices, doing activities together, comforting) to loved ones (family, friend or partner) facing general stressful situations. However, the complexity of the care task (e.g. helping to undress, assisting in taking a bath), the providers' social ties with the recipient (e.g. close relationship or stranger), and the severity of the recipient's problem may all influence the providers' psychological wellbeing in the course of supporting others (Clark et al., 1988; Nijboer et al., 1999). For instance, a community-based study of the benefits of helping others suggested that when care tasks overwhelmed the provider, the support appeared to be negatively associated with the helper's mental health (Schwartz et al., 2003). Therefore, future research aimed at stress-specific (e.g., chronic disease) support provided in different relationships among different populations could offer an interesting extension to the current findings. Moreover, we examined the moderating role of UC with samples including predominantly women. More sex-balanced samples are needed for future studies. Finally, we have addressed and discussed several plausible interpretations of the moderating role of UC. Future studies directly investigating these psychological explanations could contribute to our understanding of why UC moderates the link between support provision and depressive symptoms, and may provide suggestions to help reduce depressive symptoms in high UC individuals.

CHAPTER 4

UNMITIGATED COMMUNION AND DEPRESSIVE MOOD: A MEDIATED MODERATION MODEL



Unmitigated communion (UC) is a personality characteristic defined as an extensive focus on others to the exclusion of the self (Helgeson, 1994; Helgeson & Fritz, 1998). It was developed from two broader personality constructs, namely agency and communion. According to Bakan (1966), agency reflects a focus on the self and separation whereas communion reflects a focus on others and connections. UC is the extreme communal orientation that precludes the existence of agentic orientation. Individuals possessing UC tend to have an extreme orientation towards others which may cause them to become overly involved with others and subjugate their own needs to the needs of others (Helgeson, 1994). For instance, UC has been found to be related to low self-esteem, relying on others' opinions for self-evaluation, behaving overprotectively towards others, and having difficulties standing up for themselves (Helgeson, 1994; Helgeson & Fritz, 1998). As a consequence, UC individuals' extreme focus on others to the detriment of the self may negatively affect their wellbeing and make them prone to experience distress. In fact, UC has drawn increasing attention particularly due to its positive association with poor psychological wellbeing. Specifically, UC has been positively related to psychological distress (Danoff-Burg, Mosher, & Grant, 2006; Fritz & Helgeson, 1998; Helgeson, 1993; Piro, Zeldow, Knight, Mytko, & Gradishar, 2001; Trudeau, Danoff-Burg, Revenson, & Paget, 2003), dysphoria (Bruch, 2002), depressive symptoms (Helgeson, Escobar, Siminerio, & Becker, 2007; Helgeson, Siminerio, Escobar, & Becker, 2009; Jin, van Yperen, Sanderman, & Hagedoorn, 2010), and depression (Aubé, 2008; Fritz, 2000; Ghaed & Gallo, 2006; Helgeson & Fritz, 1999; Nagurney, 2007) across various clinical and healthy samples.

Despite a growing interest in the positive link between UC and poor psychological wellbeing, relatively little attention has been devoted to mechanisms through which UC may affect psychological wellbeing, especially depressive mood. The purpose of the current study was to fill this gap. Specifically, we focused on high UC individuals' tendency to base their judgment of the self on what others think (i.e., their externalised self-evaluation) and examined the effect of self-evaluative feedback on depressive mood as a function of UC. To do so, we conducted a scenario study in which we manipulated self-evaluative feedback. Because negative

feedback has stronger and more consistent effects on frustration and dissatisfaction (Kluger, Lewinsohn, & Aiello, 1994), relative to positive feedback, it will result in more depressive mood. However, this can be expected to be particularly true for high UC individuals because their perception of the self is excessively based on others' opinions and they do not regard the self highly. When facing let-downs, they would have more difficulties to maintain self-esteem and thereby experience more negative emotions. In contrast, low UC individuals with their less externalised self-evaluation strategy and more positive self-view may find another valued aspect of the self or source of esteem when confronted with negative feedback, and thereby may stay away from feeling sad. Hence, we expected high UC individuals' depressive mood to be more strongly affected by negative feedback.

Using external standards for self-evaluation appears to play an important role in the manifestation of depression in high UC individuals (Jin et al., 2010). Although we all to some degree "... unconsciously see ourselves as we think others who are important to us do" (Rosenberg, 1979, p.97), high UC individuals are extremely concerned about others' opinions about the self and excessively shape their self-worth on the basis of appraisals from others (Fritz & Helgeson, 1998; Hennig & Walker, 2008). Such extreme dependency on others' opinions for self-evaluation is likely to result in low trait self-esteem, or unstable state self-esteem, or both, when people encounter situations in which they are rejected or disapproved of by others (Crocker & Wolfe, 2001). In turn, low and unstable self-esteem predicts the onset of depressive symptoms (Barnett & Gotlib, 1988; Kernis et al., 1998; Roberts, Gotlib, & Kassel, 1996; Roberts & Kassel, 1997; Roberts & Monroe, 1992; Swallow & Kuiper, 1988).

The idea that high UC individuals are vulnerable to depressive mood owing to their externalised self-evaluation is based on the assumption that high UC makes individuals more sensitive to negative self-evaluative feedback such as rejection and disapproval by others. This is in line with the contingencies of self-worth model (Crocker & Wolfe, 2001), which posits that people differ in their bases of self-worth. Specifically, one may derive self-worth from various domains (e.g.,

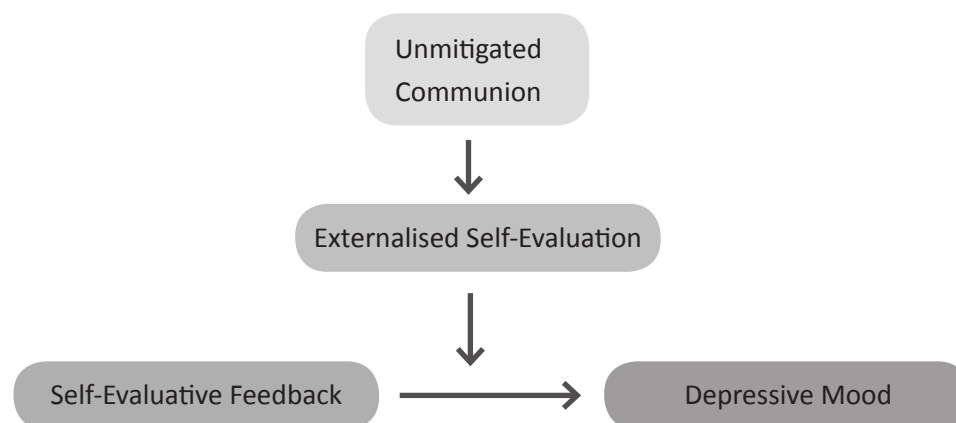
academic competence, physical attractiveness, and gaining others' approval). The more that a person's self-worth is contingent on a certain domain, the more a threat to this domain affects this person. For example, it has been shown that people whose self-worth was highly contingent on others' approval, reported lower state self-esteem and more negative affect than people whose self-worth was not highly contingent on others' approval when a relevant threat occurred (Park & Crocker, 2008). Whether the impact of negative self-evaluative feedback from others has a stronger effect on high UC individuals than on low UC individuals has not been directly tested yet. However, some indirect evidences do exist. Specifically, in one study of fibromyalgia syndrome patients, researchers conducted interviews about patients' social interactions during a 12-week period. It was found that high UC patients reported more negative affect when they experienced negative events (e.g., argued with a friend) in comparison to those low in UC (Nagurney, 2008). Similar findings were reported in another study of undergraduate students where interpersonal events consisting of conflict with others or rejection by others predicted more negative mood on the following day in high UC individuals than in low UC individuals (Reynolds et al., 2006).

As outlined above, it seems plausible that due to an externalised self-evaluation, negative self-evaluative feedback received from others will affect high UC individuals more strongly than low UC individuals. Specifically, for high UC individuals, receiving negative self-evaluative feedback from others can be viewed as disapproval and rejection from others, which in turn, may elicit depressive mood.

Current Study

We developed a mediated moderation model (see Figure 4.1) which proposes UC as the moderator and externalised self-evaluation as the mediating mechanism. In the experiment, participants were instructed to imagine themselves helping a friend. Then, self-evaluative feedback was manipulated. We chose a helping interaction because relationships with others are vital for high UC individuals (Helgeson & Fritz, 1998). By means of helping others, high UC individuals attempt to enhance or maintain their sense of self-worth in the eyes of others (Helgeson & Fritz, 1998).

Figure 4.1 The proposed conceptual scheme



As shown in Figure 4.1, we expected UC to moderate the association between self-evaluative feedback and depressive mood through externalised self-evaluation. Specifically, in comparison to receiving positive feedback or no feedback, receiving negative feedback was expected to elevate depressive mood especially for individuals high in UC (*Hypothesis 1*). We further anticipated that the externalised self-evaluation would explain the differences between high and low UC individuals' responses to self-evaluative feedback (*Hypothesis 2*).

Method

Participants

One hundred-and-nine first-year psychology students enrolled in the computer guided scenario experiment in exchange for course credit. Three were excluded due to non-compliance to the procedure. The final sample consisted of 106 participants (20 male, 86 female) with an average age of 21.02 ($SD = 1.49$; range = 19-26).

Design and Procedure

First, participants were asked to complete a questionnaire, including measures of UC and externalised self-evaluation amongst filler items, which they were led to believe was a pilot-test for evaluating the time indication of a newly developed measurement. Next, participants were randomly assigned to one of three experimental conditions. Specifically, they were instructed to read the hypothetical helping scenario in which self-evaluative information was manipulated such that participants would read negative feedback vs. positive feedback vs. no feedback. To ensure all participants were blind to the manipulation, they were told that the research was about how well people can imagine social situations. Subsequent to the scenario, participants were asked to rate their depressive mood and to complete several manipulation check items. The experiment was completed after the participant was debriefed.

Scenarios

All participants read the following scenario: 'You and someone you met in one of your classes have become good friends during the last four months. You and your new friend have studied together several times, and you have had coffee together on several occasions; you have enjoyed your conversations very much. Your new friend has been fortunate enough to find a very good, affordable apartment and is planning to move into the apartment after repainting it. You voluntarily offer to help your friend, and you agree to meet at his/her apartment on a free day at 10 a.m. Your task is to paint the bedroom. You are working very hard. Ignoring the

fact that your arms are aching and you are sweating profusely, you focus on helping your friend with the painting. The work is completed by 2 p.m. While you are cleaning up the supplies your friend comes in and brings you a soda.'

In the *negative self-evaluative feedback* condition, participants read the feedback as follows 'While you are drinking your soda, your friend clearly shows that he/she is not pleased with your work and is obviously not joking'. In the *positive self-evaluative feedback* condition, participants read as follows 'While you are drinking your soda, your friend clearly shows that he/she is sincerely pleased with your work'. In the *no feedback* condition, participants read 'while you are drinking your soda, your friend gathers up the supplies and walks into the kitchen'.

Measurements

UC was measured with the revised Unmitigated Communion Scale (Helgeson & Fritz, 1998). Examples include 'I often worry about others' problems' and 'I always place the needs of others above my own'. The nine items were answered on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A single index was computed by the averaging nine items within subjects, with higher scores reflecting a higher degree of UC ($M = 3.46$, $SD = .52$, Cronbach's $\alpha = .69$).

Externalised self-evaluation was measured with five items (two of them were from the subscale of Silencing the Self Scale, Jack & Dill, 1992). Participants rated the degree (1 = *strongly disagree*, 5 = *strongly agree*) to which they agreed with the following statements, 'I judge myself mostly according to what others think about me', 'I base my decisions mostly on the ideas and opinions of others', 'When others hold strong negative opinions about me, I have serious doubts about myself', 'My opinion of myself is strongly influenced by what others think about me', and 'I am truly satisfied with myself only when others accept and like me'. A single index was computed by summarizing the five items within subjects, with higher scores reflecting a higher degree of externalised self-evaluation ($M = 15.30$, $SD = 4.01$, Cronbach's $\alpha = .83$).

Depressive mood was measured with three items. Participants rated how much they actually felt 'depressed', 'hurt', and 'worried' at the moment on a five-point scale ranging from 0 (*very slightly or not at all*) to 4 (*extremely*) immediately after they received negative, positive, or no personal feedback. A single index was computed by summing the three items within subjects, with a higher score indicating higher levels of depressive mood ($M = 2.47$, $SD = 3.25$, Cronbach's $\alpha = .89$).

Manipulation Check

The effectiveness of the manipulation was assessed by six items. Two sample items include 'Did your friend respond friendly to you' (reverse-scored) and 'Did your friend respond negatively to you'. Answers were given on a 5-point scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). By averaging the six items, we computed a single index, with higher scores representing more negative perceptions of the feedback (Cronbach's $\alpha = .95$).

Furthermore, we asked about the credibility and the imaginability of the hypothetical task: To what extent is the scenario likely to happen to you (1 = *very unlikely*, 5 = *very likely*), and how difficult is it for you to imagine such a helping interaction (1 = *very easy*, 5 = *very difficult*). To ensure that they processed the scenario, we also asked the participants to report several details from the scenario, such as 'What was your task in the situation you just read' (Correct response = 94.3%), 'Where did your task take place' (Correct response = 77.4%) and 'Whom did you help' (Correct response = 91.5%).

Results

Manipulation Check

One-way ANOVAs were computed to compare the experimental conditions (i.e., negative feedback vs. positive feedback vs. no feedback). The participants in the negative feedback condition rated the feedback as significantly more negative ($M = 3.00$, $SD = .99$) than did participants in the positive feedback condition ($M = 1.58$, $SD = .69$) and no feedback condition ($M = 1.79$, $SD = .92$), $F(2, 103) = 26.89$,

$p < .01$. The participants in the positive feedback condition rated the feedback as positive as those in the no feedback condition, $F(1, 69) = 1.59, p = .21$. This suggests that in a helping interaction with a friend, providing positive feedback does not increase the already positive evaluation of the no feedback situation.

Next, the feedback manipulation was dummy-coded into two dummy variables: one with positive feedback coded as 1 and the other two conditions as 0, and one with negative feedback coded as 1 and the other two conditions as 0. We centred the continuous variables around zero and multiplied these with the dummies to form the interaction terms (Aiken & West, 1991). Participants' perceptions of the received feedback were regressed on UC, feedback dummies, and their interactions. The nonsignificant interactions ($ps > .48$) indicate that UC did not affect participants' perceptions of the feedback across the three conditions. Phrased differently, high UC individuals did not perceive the negative (or positive) feedback more negatively than those low in UC, and there is no evidence that high UC individuals tended to perceive the no feedback situation differently (i.e., more negatively) than low UC individuals.

Furthermore, no differences were found among the three conditions with respect to the credibility ($M_{\text{overall}} = 4.33, SD = .89$) and imaginability ($M_{\text{overall}} = 1.97, SD = 1.08$) of the hypothetical helping task ($ps > .19$). Next, credibility and imaginability were regressed on UC, feedback dummies, and their interactions, respectively. The nonsignificant interactions ($ps > .38$) indicate that across the three conditions, UC did not affect participants' perceptions that the scenario might happen to them and their abilities to imagine the helping interaction.

Bivariate Relations Between Study Variables

Externalised self-evaluation was positively associated with UC ($r = .29, p < .01$) and depressive mood ($r = .31, p < .01$). UC and depressive mood were unrelated ($r = .11, p = .28$). Significant sex differences emerged in UC and externalised self-evaluation, with women ($M = 3.53, SD = .49$) reporting higher levels of UC than

men ($M = 3.14, SD = .55$), $t(104) = -3.16, p < .01$, and higher levels of externalised self-evaluation ($M_{\text{women}} = 15.87, SD = 3.87$; $M_{\text{men}} = 12.85, SD = 3.75$), $t(104) = -3.16, p < .01$. No sex differences were found with respect to depressive mood.

Test of the Moderating Effect of UC

To test the moderating role of UC, depressive mood was regressed on the self-evaluative feedback dummies, UC, and their interactions while including sex as a covariate. As shown in Table 4.1, the main effect of negative feedback ($B = 4.56, p < .001$) was qualified by the interaction of UC and self-evaluative feedback ($B = 1.96, p = .04$). To understand how self-evaluative feedback affects depressive mood as a function of UC, we plotted simple regression lines representing the association between UC and depressive mood for each feedback condition as suggested by Aiken and West (1991). To further explore the nature of the interaction effect, simple slopes analyses were performed. As shown in Figure 4.2, individuals high in UC reported significantly more depressive mood than those low in UC while receiving self-evaluative negative feedback ($B = 1.82, p = .01$). By contrast, individuals high in UC reported similar levels of depressive mood than those low in UC while receiving positive ($B = .04, p = .96$) or no self-evaluative feedback ($B = -.14, p = .83$). The effect of receiving negative feedback in comparison to receiving positive or no self-evaluative feedback was significant within each of two levels of UC, one SD below and one SD above mean ($ps < .001$), but the interaction indicates that this effect was stronger for participants relatively high in UC.

Table 4.1 Test of Mediated Moderation Model

	Depressive Mood			Externalised self-evaluation (ESE)			Mediated Moderation Model		
	<i>B</i> ^a	<i>SE</i>	<i>t</i>	<i>B</i> ^a	<i>SE</i>	<i>t</i>	<i>B</i> ^a	<i>SE</i>	<i>t</i>
Step 1									
Sex (1 = men, -1 = women)	-.29	.28	-1.03	-1.17	.49	-2.40*	-.28	.28	-1.00
<i>R</i> ²	.02			.09			.02		
<i>F</i>	1.78			10.01**			1.78		
Step 2									
UC	-.14	.67	-.22	1.73	.74	2.33*	-.03	.67	-.05
Positive self-evaluative feedback	-.93	.52	-1.80				-.89	.50	-1.76
Negative self-evaluative feedback	4.56	.50	9.15***				4.21	.49	8.56***
ΔR^2	.56			.05			.56		
ΔF	43.90***			5.44*			43.90***		
<i>R</i> ²	.57			.13			.57		
<i>F</i>	33.92***			7.94**			33.92***		
Step 3									
UC \otimes Positive self-evaluative feedback	.18	1.02	.18				.04	1.03	.04
UC \otimes Negative self-evaluative feedback	1.96	.94	2.09*				1.09	.96	1.14
ΔR^2	.02						.02		
ΔF	2.53						2.53		
<i>R</i> ²	.59						.59		
<i>F</i>	24.15						24.15***		
Step 4									
ESE							-.04	.10	-.44
ESE \otimes UC							.08	.10	.78
ESE \otimes Positive self-evaluative feedback							.07	.13	.57
ESE \otimes Negative self-evaluative feedback							.37	.14	2.71**
ΔR^2							.05		
ΔF							3.13*		
<i>R</i> ²							.64		
<i>F</i>							16.99***		

* $p < .05$; ** $p < .01$; *** $p < .001$ ^aThe unstandardized regression weights concern the analysis in which all main and interaction effects were entered*Test of Mediated Moderation*

To test the mediated moderation, we performed two additional regression analyses. First, externalised self-evaluation was regressed on UC with sex as a covariate. As shown in Table 4.1, we found the expected main effect of UC on the externalised self-evaluation ($B = 1.73$, $p = .02$). Next, we regressed depressive mood on feedback dummies, UC, externalised self-evaluation, and their interactions with sex as a covariate.¹ As expected, the interactive effect of self-evaluative feedback by UC was reduced and insignificant ($B = 1.09$, $p = .26$) when externalised self-evaluation and its interaction with self-evaluative feedback were included in the analysis (see Table 4.1). Furthermore, the interaction between externalised self-evaluation and self-evaluative feedback was significant ($B = .37$, $p = .01$). As shown in Figure 4.3, the association between externalised self-evaluation and depressive mood was significant when feedback was negative ($B = .37$, $p < .001$), but not significant when feedback was positive ($B = .03$, $p = .70$) or when no feedback was provided ($B = -.05$, $p = .62$). Follow-up analyses showed that the effect of receiving negative feedback in comparison to receiving positive or no self-evaluative feedback was significant within each of two levels of externalised self-evaluation, one SD below and one SD above mean ($ps < .001$), but the interaction indicates that this effect was stronger for participants relatively high in externalised self-evaluation.

All together, these results suggest that high UC individuals were more depressed while receiving negative self-evaluative feedback than those low in UC (see Figure 4.2) through their use of external standards for self-evaluation (see Figure 4.3 and Table 4.1). These results provide empirical support for both *Hypothesis 1* and *Hypothesis 2*.

¹ Because our sample consists of both men and women, we tested whether the proposed mediated moderation model differed between men and women. Specifically, we repeated the same analysis with sex included as a second moderator. The externalised self-evaluation \times negative feedback interaction remained significant ($B = .28$, $p = .02$)

Figure 4.2 Interactive Effect of Self-evaluative Feedback and Unmitigated Communion on Depressive Mood

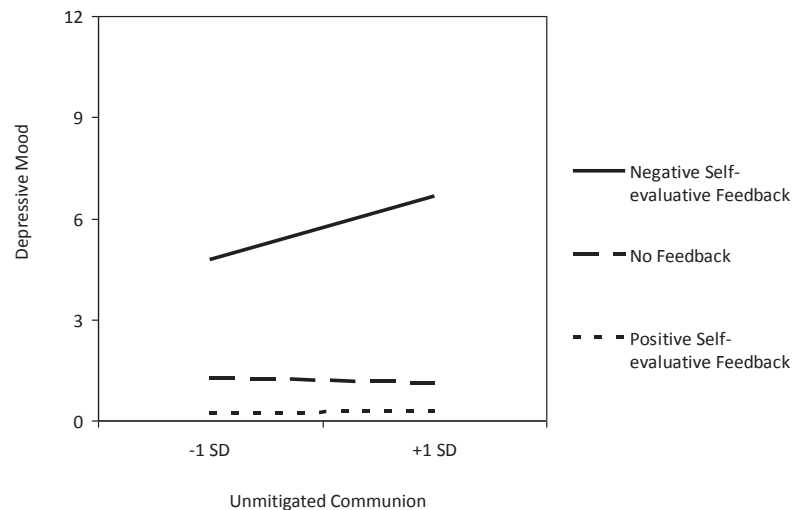
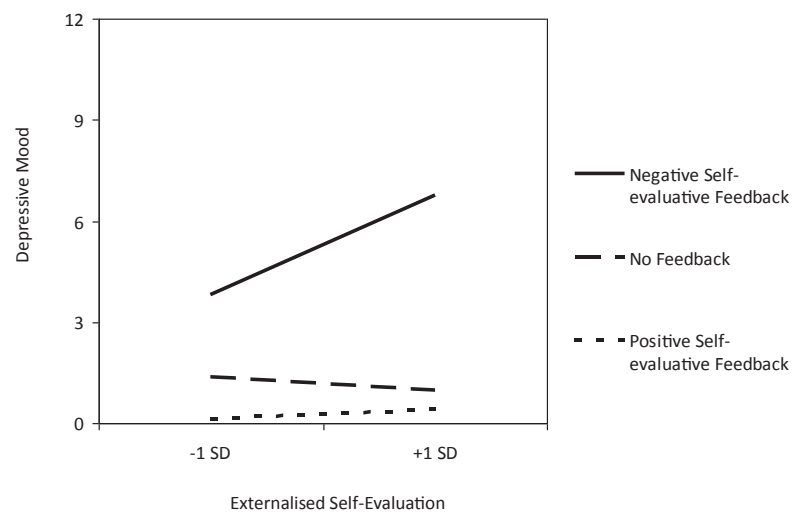


Figure 4.3 Interactive Effect of Self-evaluative Feedback and Externalised Self Evaluation on Depressive Mood



Discussion

The goal of the current study was to gain more insight into the role of UC and externalised self-evaluation in the self-evaluative feedback-depressive mood association. Results supported the hypothesized mediated moderation model. Specifically, participants reported more depressive mood after receiving negative feedback than after receiving no feedback or positive feedback, especially if they scored high on UC. In addition, our findings suggest that high UC individuals are more sensitive to negative feedback than are low UC individuals owing to their externalised self-evaluation.

Theoretical Implications

This study contributes to our knowledge about the vulnerability of UC individuals to negative psychological wellbeing in several ways. First, we confirmed the important role of externalised self-evaluation in understanding the vulnerability of UC to depressive mood. Until now, only correlational studies suggested that externalised self-evaluation may be the underlying cognitive mechanism linking UC to depressive symptoms (Aubé, 2008; Fritz & Helgeson, 1998). In the present experimental study, we showed that individuals high in UC, and hence, whose self-evaluation was contingent on others’ evaluations, a threat to this domain of worth (i.e., receiving negative feedback) had a stronger impact on these individuals in comparison to individuals low in UC whose self-worth was not, or at least to a lesser degree, contingent on others’ evaluations.

Second, we demonstrated that it is important to take interpersonal factors into account in understanding high UC individuals’ risk to depressive mood. UC and its implication for negative wellbeing has traditionally been framed in a cognitive or behavioural perspective, such that high UC individuals’ negative psychological wellbeing are to be understood as the product of their biased thinking and maladaptive behaviours (Helgeson, 2003). However, a number of researchers have suggested that the onset of depression can be better understood by an integration of cognitive factors and interactions with the social environment (Brown &

Harris, 1978; Coyne, 1976). Our study is in line with this idea that the vulnerability of high UC individuals to negative psychological wellbeing, depressive mood particularly, depends on the external self-evaluative feedback received from others, such that negative feedback is particularly harmful for those high in UC.

Third, the results of our experimental study suggest that it may not be the misinterpretation of others' evaluations, but the relatively strong sensitivity to negative feedback that accounts for the depressive mood among high UC individuals. The interpersonal model of depression (Coyne, 1976) demonstrated that in addition to the need for reassurance from others, the misinterpretation of others' evaluations played an important role in the manifestation of depression. Our study did not show evidence for this. High UC people seemed to be more concerned about being negatively evaluated by others and reported greater depressive mood than those low in UC when they received negative feedback, but they did not perceive the feedback (or the no feedback situation) more negatively than those low in UC.

Fourth, our data showed that individuals high in UC reported similar levels of depressive mood than those low in UC while receiving positive feedback. This is consistent with previous research demonstrating that people, regardless whether their self-view is positive or negative, tend to feel equally well after receiving favourable feedback (Shrauger, 1975; Tafari & Swann, 1996). However, because high UC individuals rely more strongly on others' opinions for self-evaluation than do low UC individuals, one might have expected a stronger effect of positive feedback on high UC individuals. Part of the answer to this question may come from a consideration of high UC individuals' firmly held negative self-views. Past research has demonstrated that people are motivated to seek self-confirming feedback in order to bolster one's perception of control (i.e., one's self-perceptions are reliable and veridical; see Swann, 1990; 1996; 1997, for reviews). Accordingly, high UC individuals, who typically possess a negative self-view are motivated to seek feedback that fits their negative self-view. Thus, they may perceive a mismatch between their self-view and received positive feedback, which consequently threatens their perception of control, and eventually may dampen the strong

positive impact of others' favourable appraisals. On the other hand, although receiving negative feedback matches high UC individuals' negative self-view, such unfavourable feedback acts to preserve one's negative self-perception and thereby depressed mood.

Put in a broader perspective, the current findings shed light on possible explanations of the generally high level of negative psychological wellbeing among high UC individuals. In addition to the sensitivity to negative feedback, high UC individuals may create more situations in which they are confronted with negative feedback. Specifically, we assumed that high UC individuals receive negative feedback at least as often as low UC individuals, thus a stronger impact of negative feedback could explain higher levels of depressive mood often reported by high UC individuals. However, previous studies reported several maladaptive behaviours associated with UC, including overprotection, intrusiveness, and lack of assertion (Aubé, 2008; Fritz & Helgeson, 1998; Helgeson & Fritz, 1999). Behaving in such a manner may irritate the people whom they interact with and elicit dislike and rejection. In other words, it is plausible that acting in this way increases the chance that high UC individuals will receive negative feedback from interaction partners, thereby explaining why high UC individuals may receive negative feedback (verbal or non-verbal) from others more frequently than those low in UC.

In the current research, we emphasized the role of externalised self-evaluation and its interaction with the interpersonal context. It is important to mention that externalised self-evaluation may be a source of distress in and of itself, but may also stimulate interpersonal maladaptive behaviours, such as overinvolvement and self-neglect. In turn, this may contribute to the UC-negative psychological wellbeing association. According to Fritz and Helgeson (1998), as individuals high in UC base their self-evaluation on what others think of them, they may subjugate their own needs (i.e., self-neglect) and become overinvolved in others' problems in order to raise a positive sense of self-worth in others' eyes. Leary, Tambor, Terdal, and Downs (1995), likewise commented that people who depend on others for self-evaluation might strive to conform to others' expectations in order to

maximize the acceptance and minimize the rejection and exclusion in relationships with others. Indeed, Fritz and Helgeson (1998), reported that externalised self-evaluation accounted for nearly all of the relation of UC to self-neglect and part of the relation of UC to overinvolvement with others.

Limitations and Future Research

The current study tested the emotional reaction to feedback in a hypothetical helping situation. This limits external validity of the study and needs to be taken into account when interpreting the data. Although imagined scenarios are widely applied in psychological research on emotions and show comparable results for both real and imagined reactions to emotional stimuli (Robinson & Clore, 2001), future research using actual negative feedback should extend and validate our findings. Second, while feedback was manipulated experimentally in this study, UC and externalised self-evaluation were assessed by self-report measures. This may raise the question concerning the sequence of UC as a moderator and externalised self-evaluation as a mediator in the tested model (i.e., a different model with externalised self-evaluation as a moderator and UC as a mediator seems plausible). However, our results did not suggest such reversed sequence to be plausible because the interactive effect of UC and self-evaluative feedback on depressive mood was insignificant in the last step of the mediated moderation analysis (see Table 4.1). Nonetheless, further experimental research measuring UC and externalised self-evaluation apart in time from the feedback manipulation or manipulating UC and externalised self-evaluation (e.g., via priming) could clarify their role in the mediating process. Third, the self-report measures used in this study can be biased by social desirability and self-deception. However, past research has shown no differences in UC between self and peer reports (Aubé, 2008). Future research that replicates current findings with behavioural data or ratings by independent observers can add confidence to our results. Fourth, findings discussed in the current study are based on a sample of college students, whose UC levels are typically modest (Danoff-Burg et al., 2006; Fritz & Helgeson,

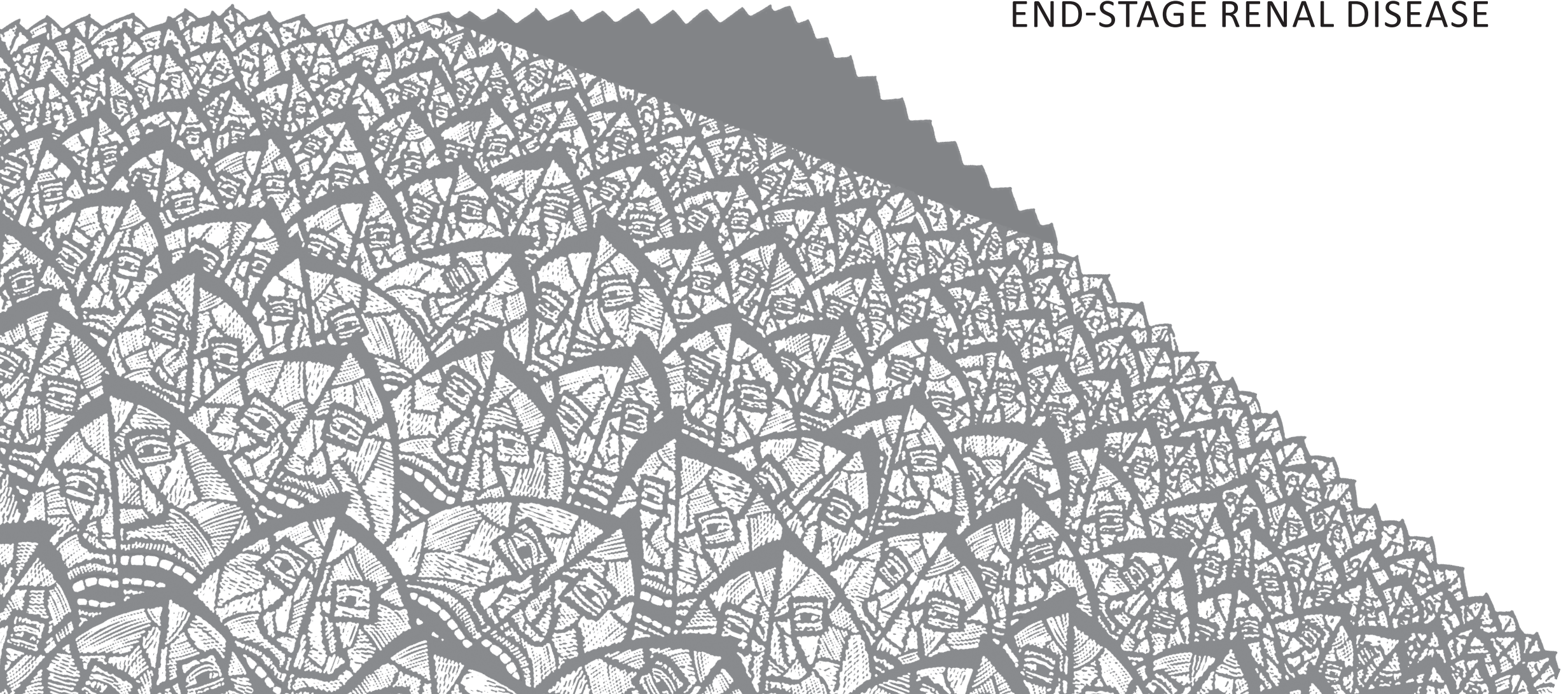
1998; Nagurney, 2007; Trudeau et al., 2003). Thus, future work is needed to test the current hypotheses within groups with higher levels of UC, in which perhaps even a stronger impact of negative feedback may be expected.

Conclusion

Research focusing on the psychological process underlying the UC-depressive mood relation is quite sparse. The current study portrays a mediated moderation model that provides plausible explanations for the vulnerability of UC to depressive mood. That is, the combination of externalised self-evaluation and negative feedback appears to be particularly harmful for people high in UC.

CHAPTER 5

UNMITIGATED COMMUNION AND PSYCHOLOGICAL DISTRESS IN SPOUSES OF PATIENTS WITH END-STAGE RENAL DISEASE



Unmitigated communion (UC) is a personality characteristic defined as an extensive focus on others to the exclusion of the self (Helgeson, 1994; Helgeson & Fritz, 1998). Specifically, persons characterized by UC are excessively concerned with others and their problems, they place others' needs before their own, and they help others without accepting anything in return (Fritz & Helgeson, 1998; Helgeson & Fritz, 1999). In other words, high UC people possess a strong caregiver identity.

Previous studies on UC have been mainly devoted to address two issues: (1) the notion that UC predisposes individuals to experience poor wellbeing and (2) the underlying processes that may explain the link between UC and wellbeing. To date, a sizeable number of studies have shown UC to be negatively linked to psychological wellbeing in various populations, including college students (Aubé, 2008; Bruch, 2002; Fritz & Helgeson, 1998; Jin, van Yperen, Sanderman, & Hagedoorn, 2010), adolescents (Helgeson, Escobar, Siminerio, & Becker, 2007), healthy adults (Amanatullah, Morris, & Curhan, 2008), and adults with heart diseases (Fritz, 2000; Helgeson, 1993; Helgeson & Fritz, 1999), rheumatoid arthritis (Danoff-Burg, Revenson, Trudeau, & Paget, 2004; Trudeau, Danoff-Burg, Revenson, & Paget, 2003), fibromyalgia syndrome (Nagurney, 2008), and breast cancer (Piro, Zeldow, Knight, Mytko, & Gradishar, 2001). Moreover, a few earlier studies have suggested behavioural mechanisms that might transmit the effect of UC to psychological wellbeing, such as maladaptive interpersonal behaviours and poor health behaviour (Fritz & Helgeson, 1998; Helgeson, 1993; Helgeson et al., 2007). However, these previous studies have two limitations. First, the link between UC and psychological wellbeing has been mainly examined in people facing their own personal problems. Hence, we do not know whether the UC-wellbeing link exists when individuals are confronted with significant others' problems. This is interesting because in such a context high UC individuals' identity as support provider or caregiver will be activated and become salient. In fact, it has been suggested that individuals characterized by UC may be most vulnerable to distress in situations that involve caregiving (Helgeson, 1993). Second, in comparison to behavioural mechanisms, the cognitive mechanisms that may mediate the association be-

tween UC and psychological wellbeing are much less examined. It is important to examine cognitive mechanisms because knowledge about the underlying processes may not only add to our theoretical understanding of the unique characteristics of UC, but may have practical significance for the development of cognitive interventions for high UC individuals as well.

Therefore, the goal of the present study is two-fold. The primary goal is to revisit the role of UC in psychological wellbeing but in a context in which individuals' identity as a support provider or a caregiver will be activated and become salient. More specifically, we examine the UC-psychological distress link in spouses of seriously ill patients, i.e., end stage renal disease (ESRD) patients. ESRD is a progressive disease, which results in increased dependency of the patient on other people. One may expect that patients' spouses who are high in UC are particularly vulnerable to the negative consequences in such a situation because a core aspect of UC individuals' self-concept, i.e., being helpful to others, has been activated. The second goal is to expand on previous research by examining three potential cognitive mechanisms suggested in the literature that may mediate the link between UC and psychological distress, namely externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy concerning support provision. The next section describes these potential mechanisms in more detail.

Cognitive Mechanisms

The reason that UC individuals are prone to psychological distress may have to do with the two essential aspects of UC, i.e., the tendency to subject oneself to the demands of others and the tendency to neglect oneself. Based on this idea, researchers have speculated about potential explanations that may link UC to poor health. However, cognitive mechanisms such as personal control have been largely neglected. Rather, studies have focused on behavioural factors as mediators, including interpersonal difficulties (e.g., intrusiveness and overly nurturing) and inadequate help seeking (Helgeson, 2003a). For example, interpersonal difficulties (e.g., being overly nurturant and intrusive, being exploitable, non-assertive,

and feeling uncomfortable receiving support from others) were found to mediate the link between UC and depression among students (Fritz & Helgeson, 1998). Similarly, poor health behaviours (e.g., disturbed eating behaviour and poor adherence to exercise regimen) were found to be partly mediating the link between UC and depression among adolescents with diabetes (Helgeson et al., 2007) and among adults with heart disease (Fritz, 2000).

In contrast, the mediating role of cognitive indicators in the link between UC and psychological distress has rarely been examined. To our knowledge, only one study in breast cancer patients showed that low self-esteem, personal control, and dispositional optimism marginally explained the negative link between UC, on the one hand, and emotional functioning and mental health, on the other (Helgeson, 2003b). Although the explanatory power of the mediation failed to reach statistical significance, these results suggest that cognitive indicators as potential mechanisms warrant future investigation.

Accordingly, in the present research, we propose a multi-mediator model comprising three cognitive parameters which mediate the link between UC and psychological distress among caregivers, in this case, ESRD patients' spouses. Specifically, we argue and demonstrate that externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy concerning support provision, may explain the link between spouses' level of UC and their psychological distress.

Externalised Self-evaluation

An underlying motivator that may account for the positive association between UC and psychological distress concerns high UC individuals' tendency to rely on others' opinions to evaluate oneself (Helgeson & Fritz, 1998). Regardless of one's level of UC, we all, to some extent, are "unconsciously seeing ourselves as we think others who are important to us do" (Rosenberg, 1979, p97). However, people high in UC evaluate themselves based on appraisals of others to the extreme. Previous studies have shown that UC was positively associated with reliance on others' opinions to evaluate oneself (Fritz & Helgeson, 1998; Hennig & Walker,

2008; Jin, van Yperen, Sanderman, & Hagedoorn, 2009) and a high fear of negative evaluation by others (Helgeson & Fritz, 1998). It has been suggested that the reason for high UC individuals to provide help to others is their excessive drive of enhancing their self-worth in the eyes of others and subsequently their own self-image (Helgeson & Fritz, 1998). By helping others, individuals high in UC seek to obtain others' praise or avoid others' disapproval such that they feel good about themselves. However, this excessive dependency on others for one's self-evaluation may increase the risk for depression (Barnett & Gotlib, 1988). In a similar vein, Crocker and Wolfe (2001) have suggested that making one's self-evaluation contingent on others' opinions is likely to result in unstable self-esteem, which in turn predicts the onset of depressive symptoms (Roberts, Gotlib, & Kassel, 1996; Roberts & Kassel, 1997; Roberts & Monroe, 1992). Supporting this notion, an experimental scenario study, Jin et al. (2009) demonstrated that receiving negative feedback from friends predicts depressive mood especially in individuals characterized by externalised self-evaluation. Hence, it can be expected that ESRD patients' spouses who are high in UC engage more in externalised self-evaluation, which makes them more vulnerable to psychological distress.

Experiencing Partner's Illness as One's Own

Another cognitive feature that may account for the UC-psychological distress relation refers to the tendency of being overly involved in others' problems and experiencing patient's illness as one's own. UC has been shown to be associated with feeling too responsible for helping another person and having frequent and intrusive thoughts about others' problems (Fritz & Helgeson, 1998; Helgeson & Fritz, 1998; Helgeson & Fritz, 1999). Moreover, high UC individuals appear to be more strongly influenced by stressful events that occur to others than individuals low in UC (Helgeson, 2003a; Helgeson & Fritz, 1998). Such a characteristic of UC seems to be troublesome because past research has suggested that spouse carers who become emotionally overinvolved in their loved one's problem and take the stressors or problems as their own personal event, may foster more distressing effects than those who are less likely to overinvolve in affairs of their loved ones (Kessler, McLeod, & Wethington, 1985). Although the distinct relations between UC and

experiencing others' problem as one's own, on the one hand, and between experiencing others' problem as one's own and poor psychological wellbeing, on the other, have been studied before, there is no published study that combined both relations into one model. Based on this previous work, we expected that the inclination of experiencing partner's illness as one's own problem mediates the relation between UC and the psychological distress of spouses of patients with ESRD.

Self-efficacy Concerning Support Provision

Self-efficacy is the extent to which individuals feel confident about their ability to perform a certain action (Bandura, 1977). In this study, the term self-efficacy refers to spouses' belief in their ability to carry out supportive behaviours to their ill partners. It has been known that self-efficacy or lack thereof affects people's emotional states and psychological wellbeing (Bandura, 1977). Accordingly, high perceived competence to support one's partner can be especially protective against negative outcomes and beneficial for maintaining a good level of psychological wellbeing (Gilliam & Steffen, 2006; Hagedoorn, Sanderman, Buunk, & Wobbles, 2002; Nijboer, Triemstra, Tempelaar, Sanderman, & van den Bos, 1999). Although researchers have not linked UC, per se, to self-efficacy concerning support provision, UC has been linked to correlates of self-efficacy, such as low global self-esteem and low situational specific self-esteem (Fritz & Helgeson, 1998; Helgeson, 2003b; Helgeson & Fritz, 1999). Thus, it can be expected that spouses with higher levels of UC report lower competence in providing support to their ill partners and accordingly psychological distress than those with lower levels of UC.

In sum, across two studies in spouses¹ of ESRD patients who are being treated with dialysis (Study 5.1) or who received a renal transplantation (Study 5.2), we examined a multi-mediator model (i.e., externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy concerning support provision) on the link between spouses' UC and their psychological distress.

¹ For convenience, the term "spouse" will be used both for married and cohabiting couples.

Study 5.1

This study was designed to test UC in relation to psychological distress in spouses of patients with ESRD who are being treated with renal dialysis. Dialysis (i.e., haemodialysis and peritoneal dialysis) is a lifesaving procedure for patients with ESRD. However, its time-consuming and intrusive quality can be burdensome not only for patients but for spouses as well (Belasco & Sesso, 2002; Brunier & McKeever, 1993; Lowry & Atcherson, 1984). Based on the rationale outlined above, *Hypothesis 1* states that spouses' level of UC is positively associated with their psychological distress. *Hypothesis 2* is that a high level of externalised self-evaluation, experiencing partner's illness as one's own, and low self-efficacy concerning providing support, mediate the association between UC and psychological distress.

Method*Participants*

The data for the current study² was collected as part of a larger study investigating patients' and spouses' adaptation to renal disease. The Medical Ethical Committee of the University Medical Centre Groningen (UMCG) approved this study. Eighty-eight spouses (44 men) of dialysis patients were recruited with informed consent to participate in the study. Eligibility criteria included: (1) participants were married or living together with the patients, (2) participants were in command of the Dutch language, and (3) participants had no severe physical and/or mental impairments. Due to the occasional missing scores on study variables, the sample size varied somewhat through the analyses.

The mean age was 55 years ($SD = 10.70$, range = 27 to 78 years). Spouses on average had been married or lived together with the dialysis patients for 28 years ($SD = 12.96$, range = 3 to 58 years). Forty-two percent of the participants reported no health problems, 51% reported one or two health problems, whereas 7% in-

dicated more than three health complaints (e.g., asthma, high blood pressure, stroke). Thirty-three percent of the participants received low level education, 44% received intermediate level education, and 23% received high level education. More than half of the participants had a paid job (54%).

Measurements

UC. Spouses completed the 9-item revised Unmitigated Communion Scale (Helgeson & Fritz, 1998) by indicating the degree to which they agreed with nine statements, e.g., 'I often worry about others' problems' and 'I always place the needs of others above my own'. The items were answered on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A single index was computed by averaging items within subjects, with higher scores reflecting a higher degree of UC (Cronbach's $\alpha = .77$).

Externalised self-evaluation. A five-item scale was applied to assess the degree to which one engaged in externalised self-evaluation (two of them were from the subscale of Silencing the Self Scale, Jack & Dill, 1992). Spouses rated the degree to which they agreed with the following statements, 'I judge myself mostly according to what others think about me', 'I base my decisions mostly on the ideas and opinions of others', 'when others hold strong negative opinions about me, I have serious doubts about myself', 'my opinion of myself is strongly influenced by what others think about me', and 'I am truly satisfied with myself only when others accept and like me'. The items were answered on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A single index was computed by averaging the five items within subjects, with higher scores reflecting a higher level of externalised self-evaluation (Cronbach's $\alpha = .84$).

Experiencing partner's illness as one's own. Graphic-based Venn-like diagrams measured spouses' perception of being affected by the patient's illness. Spouses selected one picture that best described their experiences from seven diagrams each representing a different degree of overlap between two circles; one circle representing the self, the other his or her partner's illness. The more degree of

overlap between two circles, the more the partner's illness is seen as part of the spouse's self. Such kind of simple pictorial measures have been widely used in other domains, e.g., Inclusion of Others in the Self Scale (Aron, Aron, & Smollan, 1992) and Affect Grid (Russell, Weiss, & Mendelsohn, 1989).

Self-efficacy concerning support provision. A self-efficacy scale developed by Kuijer (2000) was used to assess self-efficacy concerning providing support to one's ill partner (see also, Hagedoorn et al., 2002). Examples are, 'I am afraid I don't support my partner enough', 'I feel powerless because there is little I can do for my partner', and 'I find it difficult to express my feelings'. Items were answered on a four-point scale ranging from 1 (*no or hardly*) to 4 (*very strong*). A single index was computed by averaging eleven items within subjects, with higher scores reflecting a higher degree of efficacy on supporting the patients (Cronbach's $\alpha = .74$).

Psychological distress. Spouses' psychological distress was measured using the 12-item self-reported General Health Questionnaire (GHQ, Goldberg & Hillier, 1979; Sanderman & Stewart, 1990). The GHQ focuses on the inability to carry out normal functions and emergence of distressing symptoms. Examples are, 'lack of sleep' and 'feelings of worthlessness'. Participants were asked to indicate to what extent they experienced psychological, social, and somatic symptoms over the past few weeks on a 4-point scale ranging from 0 (*not at all*) to 3 (*much more than usual*). A single index was computed by averaging twelve items within subjects, with higher scores reflecting a higher degree of psychological distress (Cronbach's $\alpha = .88$).

³Relations of patients' characteristics (age, education, symptoms, and comorbidities) to independent and dependent variables were examined and no significant associations were found. Therefore indicators of patients' characteristics were not included in subsequent analyses.

Results

Correlations

Table 5.1 presents the means, standard deviations, and correlations for the variables under Study 5.1.³ UC showed significant associations with all proposed cognitive variables. Specifically, the higher the UC, the greater the tendency of using external resources for self-evaluation ($r = .42$), the more likely to experience patient's illness as one's own ($r = .35$), and the lower self-efficacy concerning supporting the patient ($r = -.30$). Moreover, UC was positively related to psychological distress ($r = .41$). Furthermore, results showed significant associations linking psychological distress to external standards for self-evaluation ($r = .33$) and self-efficacy concerning support provision ($r = -.44$), but not to experiencing partner's illness as one's own ($r = .14$). Additionally, sex differences were found in UC and psychological distress. Specifically, relative to men ($M_{UC} = 3.31, SD = .47; M_{distress} = .87, SD = .36$), women ($M_{UC} = 3.59, SD = .55; M_{distress} = 1.06, SD = .44$) reported a higher level of UC, $t(88) = -2.51, p < .05$, and a higher level of psychological distress, $t(85) = -2.17, p < .05$.

Table 5. 1 Means, Standard Deviations, and Correlations Between Study Variables among Spouses of Dialysis Patients ($N = 88$)

Variables	Mean	SD	1	2	3	4	5	6
1. Age	54.77	11.03	--					
2. Sex	--	--	.05	--				
3. UC	3.44	.52	-.02	-.28**	--			
4. Externalised Self-evaluation	2.60	.72	-.10	-.14	.42***	--		
5. Experiencing Partner's Illness as One's Own	4.62	1.57	.01	-.13	.35**	.14	--	
6. Self-efficacy Concerning Support Provision	3.34	.45	.10	-.13	-.30**	-.37***	.07	--
7. Psychological Distress	.95	.42	-.08	-.23*	.41***	.33**	.14	-.44***

* $p < .05$; ** $p < .01$; *** $p < .001$.

Explaining the Relations of UC to Psychological Distress

To test the underlying mechanisms, we followed the statistical procedure outlined by Preacher and Hayes (2004; 2008). This procedure uses a bootstrapping strategy (i.e., taking 5000 of the original sample size and computing the indirect effect in each sample) which makes no assumptions about the distribution of the variables in a given model. Moreover, this procedure has several advantages comparing to some traditional analytical approaches, such as the causal step approach (Baron & Kenny D.A., 1986) and the Sobel test (Sobel, 1982; Sobel, 1986). First, it has more power in detecting mediation effects as this approach requires no estimation on each individual path in a mediation model, especially a significant total $X \rightarrow Y$ relation is not necessarily present initially (Hayes, 2009; MacKinnon, 2000; Shrout & Bolger, 2002). Second, it allows testing multiple mediators in a single model rather than having mediators examined individually in a set of simple mediation models. Consequently, it reduces parameter bias caused by omitting variables, permits to examine specific indirect effects by controlling for the presence of other mediators, and allows direct comparison on the relative magnitude of each mediator in contribution to the association between independent variable and outcomes.

UC was entered as the independent variable. Externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy concerning support provision were entered as mediators. Psychological distress was the outcome variable. Given its association with UC and psychological distress, sex was included as a control variable.⁴

We hypothesized that UC would be positively associated with spouses' psychological distress through externalised self-evaluation, experiencing partner's illness as one's own, and low self-efficacy regarding support provision (*Hypothesis 2*).

⁴ Because the current sample includes both men and women, we conducted additional analyses to test the moderation effect of sex in the proposed multi-mediator model. Specifically, we tested whether the associations from mediators (i.e., externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy of support provision) to psychological distress are different for men and women. Results showed that none of the interactions involving sex was significant. The multi-mediation model appears to be true for both men and women.

Table 5.2 Indirect Effect of Unmitigated Communion on Psychological Distress Through Externalised Self-evaluation, Experiencing Partner's Illness as One's Own and Self-Efficacy Concerning Support Provision among Spouses of ESRD Patients.

	Psychological Distress (Study 5.1, N = 88)				Psychological Distress (Study 5.2, N = 221)			
	Point Estimate	SE	BC 95% CI		Point Estimate	SE	BC 95% CI	
Externalised Self-evaluation	.0179	.0379	-.0450	.1111	.0529	.0255	.0130	.1157
Experiencing Partner's Illness as One's Own	.0175	.0311	-.0349	.0931	.0252	.0147	.0039	.0636
Self-efficacy Concerning Support Provision	.1474	.0679	.0519	.3175	.0289	.0179	.0042	.0767
Total	.1828	.0846	.0446	.3782	.1070	.0362	.0466	.1921
C1	.0003	.0513	-.0930	.1112	.0276	.0306	-.0280	.0920
C2	-.1296	.0803	-.3173	-.0042	.0240	.0290	-.0301	.0850
C3	-.1299	.0692	-.2863	-.0175	-.0037	.0215	-.0485	.0370

C1 = Externalised self-evaluation vs. Experiencing partner's illness as one's own

C2 = Externalised self-evaluation vs. Self-efficacy concerning support provision

C3 = Experiencing partner's illness as one's own vs. Self-efficacy concerning support provision

As shown in Table 5.2, results supported this hypothesis in that a total indirect effect of UC on psychological distress through the three proposed mediators was significant (i.e., the 95% bias corrected bootstrap confidence interval does not contain zero, 95% BCa bootstrap CI of .0446 to .3782, with a point estimate of .1828). UC and mechanisms accounted for 33% of the variation in psychological distress. Moreover, self-efficacy concerning of support provision showed unique specific indirect effects in linking UC to psychological distress (95% BCa bootstrap CI of .0519 to .3175, with a point estimate of .1474), whereas externalised self-evaluation and experiencing partner's illness as one's own showed a non-significant specific indirect effect in the proposed model (95% BCa bootstrap CI of -.0450 to .1111, with a point estimate of .0179, and 95% BCa bootstrap CI of -.0349 to .0931, with a point estimate of .0175, respectively). Furthermore, when

comparing these specific indirect effects, self-efficacy concerning of support provision appeared to be the strongest mediator through which UC exerts effect on psychological distress. That is, the contribution of self-efficacy concerning support provision is larger than the contributions of externalised self-evaluation (95% BCa bootstrap CI of $-.3173$ to $-.0042$, with a point estimate of $-.1296$) and experiencing partner's illness as one's own (95% BCa bootstrap CI of $-.2836$ to $-.0175$, with a point estimate of $-.1299$).

In sum, we found UC to be positively associated with psychological distress among spouses of patients with ESRD treated with renal dialysis. This association can be further understood by high UC spouses' high level of externalised self-evaluation, high tendency of experiencing patient's illness as one's own, and low level of self-efficacy concerning providing support. Perceived low self-efficacy concerning support provision showed the strongest explanatory power in mediating the cross-sectional relations of UC to psychological distress. Because this is the first study to investigate the role of UC in psychological distress in spouses of patients with ESRD, the main effect of UC and the multi-mediator model need to be validated in a new sample.

Study 5.2

Study 5.1 extended previous research concerning the underlying mechanisms of the link between UC and psychological distress to a new set of cognitive indicators as mediators. Study 5.2 sought to replicate the relation between UC and psychological distress and the multi-mediator model in a larger sample of spouses of patients who received kidney transplantation.

Kidney transplantation is the preferred treatment for patients who have severe or complete loss of kidney function. Although most patients have been found to report improved quality of life after the transplantation and to be able to return to home or work (van der Mei et al., 2006), lifelong immunosuppressive therapeutic regimen is required. Such long term medication may carry mild to severe threats to survival. Spouses often have to provide care and need to cope with patient's post-transplant physical problems (e.g., high blood pressure and high cholesterol), emotional problems, and many other health risks (e.g., cancer and diabetes) (Adams, 2006; Dobbels et al., 2008).

Method

Procedure and Participants

The data used in the current study is part of a larger study of spousal adjustment to renal disease. The Medical Ethical Committee of the University Medical Centre Groningen (UMCG) approved this study. Four hundred and sixty spouses whose partner successfully received a renal transplantation at the UMCG between 1993 and 2008 were approached for study participation. Inclusion criteria for the study were (1) in command of the Dutch language, (2) living together with the patient, and (3) having no severe physical and/or mental impairments. A total of 221 (48%) spouses (133 women and 88 men) returned the consent form in prepaid self-addressed envelopes to the research team and completed the questionnaire. Due to occasional missing scores on study variables, the sample size varied somewhat through the analyses.

For the spouses, the mean age was 55 years ($SD = 11.54$, range = 22 to 80 years). Nearly 92 percent of the sample had been married or lived together with the patients for at least 10 years ($M = 29.82$, $SD = 12.36$). The mean time since transplantation for the patients was 5 years ($SD = 4.31$, range = 0 to 15 years). Over one third (33%) of the spouses reported no health problems, over half of the participants (53%) had one or two health problems, and 14% of the participants indicated more than three health complaints (e.g., asthma, high blood pressure, stroke). The majority of the participants reported an intermediate level education (45%), whereas others reported low level education (31%) or high level education (24%). Sixty percent of spouses were employed.

Measurements

UC (Cronbach's $\alpha = .79$), externalised self-evaluation (Cronbach's $\alpha = .83$), experiencing partner's illness as one's own, self-efficacy concerning support provision (Cronbach's $\alpha = .78$), and psychological distress (Cronbach's $\alpha = .91$) were assessed using the same questionnaires as those used in Study 5.1.

Results

Correlations

Table 5.3 presents the means, standard deviations, and correlations for the variables under Study 5.2. UC showed significant associations with all proposed cognitive factors and was found to be correlated with psychological distress. Specifically, the higher the level of UC, the greater the tendency of using external resources for self-evaluation ($r = .31$), the more likely to experience partner's illness as one's own ($r = .19$), and the lower the level of self-efficacy concerning supporting the patient ($r = -.14$). Moreover, as expected, UC was also positively related to psychological distress ($r = .27$).

Furthermore, the proposed cognitive mediators showed modest correlations with psychological distress. External standards for self-evaluation and experiencing

partner's illness as one's own were associated with greater psychological distress ($r = .31$ and $r = .18$, respectively). By contrast, self-efficacy concerning support provision was significantly related to lower psychological distress ($r = -.27$).

Additionally, sex differences only emerged for two cognitive variables. Specifically, comparing to men, women reported a higher level of self-efficacy in supporting the patients ($M_{\text{women}} = 3.55$, $SD = .35$; $M_{\text{men}} = 3.42$, $SD = .34$), $t(218) = -2.79$, $p < .01$, and a lower level of experiencing patient's illness to one's own ($M_{\text{women}} = 4.03$, $SD = 1.89$; $M_{\text{men}} = 4.57$, $SD = 1.72$), $t(203) = 2.06$, $p < .05$.

Table 5.3 Means, Standard Deviations, and Correlations Between Study Variables among Spouses of Patients Received a Renal Transplantation ($N = 221$)

Variables	Mean	SD	1	2	3	4	5	6
1. Age	55.14	11.54	--					
2. Sex	--	--	.16*	--				
3. UC	3.29	.55	.09	-.11	--			
4. Externalised Self-evaluation	2.62	.69	-.12	-.10	.31***	--		
5. Experiencing Partner's Illness as One's Own	4.24	1.84	.05	.14*	.19**	.06	--	
6. Self-efficacy Concerning Support Provision	3.50	.35	-.06	-.19**	-.14*	-.24***	-.05	--
7. Psychological Distress	.83	.42	-.08	-.09	.27***	.31***	.18**	-.27***

* $p < .05$; ** $p < .01$; *** $p < .001$.

Explaining the Relation of UC to Psychological Distress

To test the multiple mediation model, the same procedure as described in Study 5.1 was applied. In addition, given its association to experiencing patient's illness to one's own and self-efficacy, sex was included as control variable.⁴

The results are generally consistent with Study 5.1. The total indirect effect of UC on psychological distress through the three proposed mediators was significant (95% BCa bootstrap CI of .0466 to .1921, with a point estimate of .1070). UC and mechanisms accounted for 19% of the variation in psychological distress. Moreover, each of these mediators appeared to be independently contributing to the UC-psychological distress association, i.e. externalised self-evaluation (95% BCa bootstrap CI of .0130 to .1157, with a point estimate of .0529), experiencing partner's illness as one's own (95% BCa bootstrap CI of .0039 to .0636, with a point estimate of .0252), and self-efficacy concerning support provision (95% BCa bootstrap CI of .0042 to .0767, with a point estimate of .0289). Furthermore, comparisons among the three specific indirect effects showed no differences in size (95% BCa bootstrap CI for each specific indirect effects included zero). This suggests that all three mechanisms are equally plausible in explaining the process through which UC is related to psychological distress. Therefore, the retest of the multi-mediator model states that UC is positively associated with psychological distress through a high level of externalised self-evaluation, excessively experiencing partner's illness to one's own, and low self-efficacy concerning support provision was supported.

⁴ Because the current sample includes both men and women, we conducted additional analyses to test the moderation effect of sex in the proposed multi-mediator model. Specifically, we tested whether the associations from mediators (i.e., externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy of support provision) to psychological distress are different for men and women. Results showed that none of the interactions involving sex was significant. The multi-mediation model appears to be true for both men and women.

General Discussion

The purpose of this research was to investigate the role of UC in psychological wellbeing of spouses of patients with ESRD, and secondly, to examine cognitive mechanisms (i.e., externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy concerning support provision) to explain the link between UC and spouses' psychological distress. Across two studies among different samples of spouses, our findings consistently showed that UC was positively related to spouses' psychological distress. Furthermore, a high level of externalised self-evaluation, experiencing partner's illness as one's own, and a low level of self-efficacy concerning support provision, jointly accounted for UC's relation to psychological distress.

We have demonstrated that given the extreme relational orientation and a self-identity revolving around the caring role, it seems UC people are prone to experience distress especially in caring situations. The results provide support for this notion. Although the correlations between UC and psychological distress in both spouse samples are modest, they are stronger in comparison to correlations between UC and distress in non-caregiving samples reported in the literature (Amanatullah et al., 2008; Aubé, 2008; Bruch, 2002; Helgeson et al., 2007; Piro et al., 2001). These findings are in line with prior work suggesting that UC individuals appear to be more vulnerable to distress in the context of supporting others than individuals low in UC (Helgeson, 1993). By focusing on a population of spouses dealing with their partner's problem, this study adds to previous knowledge on UC and its potential implications for psychological wellbeing.

We proposed and examined three cognitive factors (i.e., externalised self-evaluation, experiencing partner's illness as one's own, and self-efficacy concerning support provision) that may mediate or transmit the effect of UC to spouses' psychological distress. Our data supported such a multi-mediator model. Moreover, of the three potential mediators, self-efficacy concerning support provision was found to have the most explanatory power in mediating the cross-sectional

relations of UC to psychological distress across two samples. High UC spouses constantly feel rather incompetent when it comes to supporting partners. Such cognitive consequences of UC (i.e., negative view about self) are likely to be stable and enduring over time. Maintaining such a maladaptive view of oneself could eventually account for spouses' negative wellbeing. These findings are in line with previous research showing that individuals who feel incompetent and vulnerable are particularly at risk for the development of anxiety symptoms (Schmidt, Joiner, Young, & Telch, 1995) and chronic distress (Schmidt & Joiner, 2004). Aside from past research that either placed initial efforts on behavioural mechanisms (Fritz, 2000; Fritz & Helgeson, 1998; Helgeson, 1993; Helgeson et al., 2007) or established a cognitive model that had low explanatory power (i.e., cognitive indicators were associated with UC but were not able to statistically explain the relation of UC to health outcomes) (Helgeson, 2003b), this study is among the first to successfully identify a set of cognitive features linking UC to psychological distress among spouses.

Our findings reveal important insight into the role of UC in spousal psychological distress and the cognitive process involved in the pathway from vulnerability to the manifestation of negative psychological wellbeing. The present findings seem to fit the theoretical assumptions but should be interpreted with caution. First, while due to the cross-sectional nature of the study, we are unable to prove any particular order in the causal sequence among UC, the mediators, and psychological distress. Experimental studies are necessary to provide additional support for the causal sequence of the variables suggested in our mediation model. Second, the present study concentrated only on the psychological health of the spouses as an outcome variable. UC is defined as an excessive focus on others to the exclusion of the self (Helgeson, 1994; Helgeson & Fritz, 1998). While high UC spouses feel responsible for caring for their ill partners, they might jeopardize their own health to fulfil their caring role. In fact, UC has also been linked to poor physical health in past research (Danoff-Burg et al., 2004; Helgeson, 2003b; Trudeau et al., 2003). Therefore, it would be interesting to add physical functioning of the spouses as an outcome variable in future research in an effort to see which as-

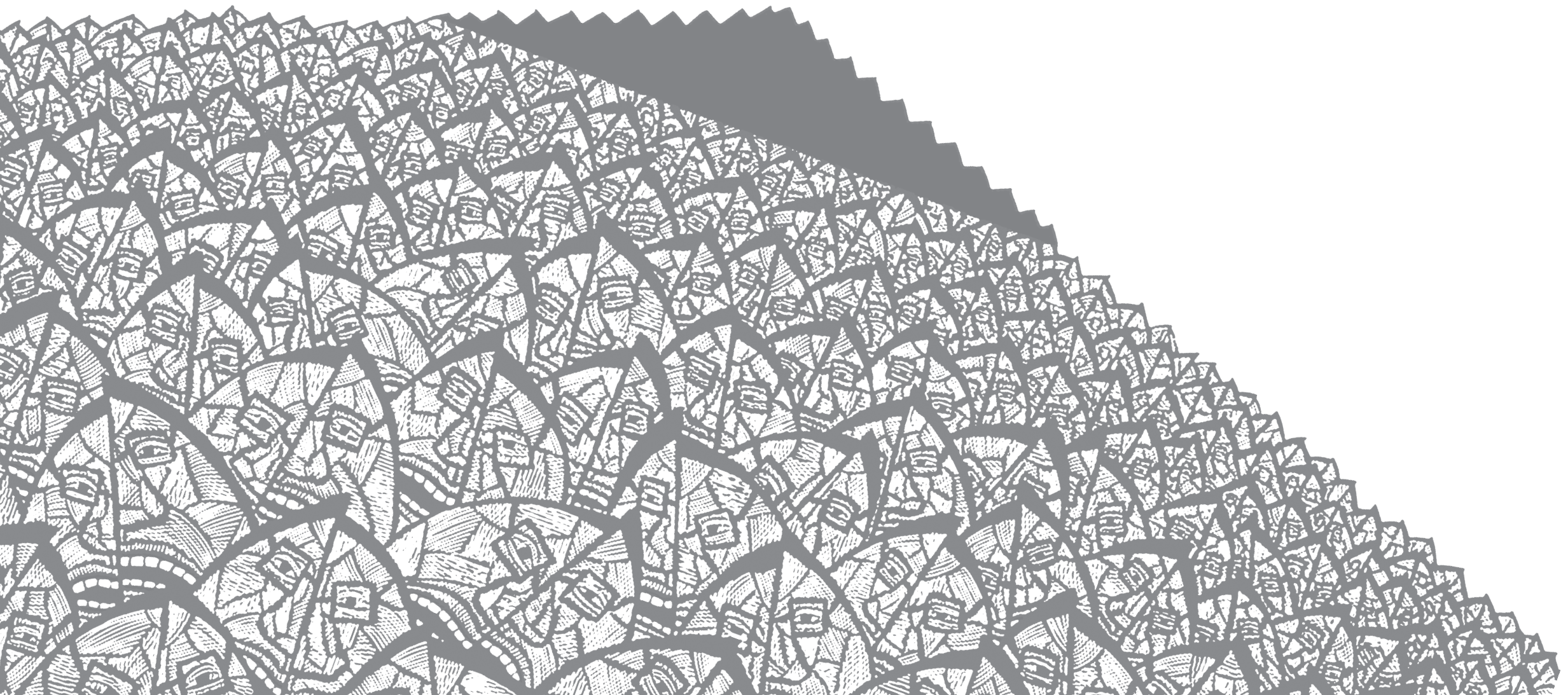
pects of spouses' health are most strongly influenced by UC. Whereas for future research, based on our data we cannot exclude the possibility that other factors might also mediate the relation between UC and spouses' psychological distress. For example, a number of studies demonstrated that the linkage between UC and poor health can be explained by behavioural factors such as being overly nurturant, being controlling, and having assertion difficulties (Fritz, 2000; Fritz & Helgeson, 1998; Helgeson, 1993; Helgeson et al., 2007). Future research integrating and testing both cognitive and behavioural pathways could further advance our understanding of UC with respect to poor mental health.

This research has some practical implications. First, the finding of UC being associated with psychological distress suggests that it may be considered to assess spouses' level of UC before entering intervention programs for couples coping with ESRD. This may help health care professionals to identify spouses who are at greater risk to experience poor psychological wellbeing and most in need for support. Second, the identification of three cognitive mediators may provide some clues for the development of an effective therapeutic treatment for high UC spouses. For instance, cognitive counselling could focus on teaching spouses skills to improve domain specific self-efficacy.

In conclusion, being high in UC increases the risk for development of poor psychological wellbeing in spouses of ESRD patients. This research not only adds to our theoretical understanding of the role of UC in psychological distress by focusing on situations where the caring role is most salient to high UC individuals, but also extends previous findings on the association between UC and psychological distress by shedding light on a new set of cognitive mechanisms. That is, high UC people's vulnerability to experience low psychological wellbeing can be understood by their exaggerated externalised self-evaluation, the perception of their partner's illness as their own, and their low self-efficacy concerning support provision.

CHAPTER 6

GENERAL DISCUSSION



When someone close to us is confronted with a problem, such as losing a job, failing exams, or getting ill, it is common for us to provide help and support to this person. Supporting a significant other in times of need is considered to be beneficial for the provider of support (Carey, Oberst, McCubbin, & Hughes, 1991; Folkman, Chesney, & Christopherrichards, 1994; Nijboer et al., 1998; Oberst, Thomas, Gass, & Ward S.E., 1989). However, increasing evidence indicates that support providers do show great variability in their psychological wellbeing even under similar circumstances such that engaging in helping activities can also result in emotional distress (Coyne & Smith, 1991; Ingersoll-Dayton & Raschick, 2004; Windsor, Anstey, & Rodgers, 2008). Attention to individual differences in the strength of the provision of support-psychological wellbeing relation, however, is limited. Therefore, the main goal of this thesis was to investigate individual differences in psychological wellbeing in support providers by focusing on a personality characteristic named unmitigated communion (UC).

By using different methodologies and study designs, this thesis examined the role of UC in support providers' psychological distress in the context of daily supportive situations (Study 3.1 and Study 3.2) and the underlying process that may explain high UC individuals' vulnerability to distress (Study 4). The cognitive mechanisms that might explain high UC individuals' psychological distress were further investigated in the context of a disease specific supportive situation, that is supporting a spouse coping with end-stage renal disease (ESRD) (Study 5.1 and Study 5.2). This chapter summarizes the main findings, discusses them in a broader context, addresses the related methodological aspects of the studies, and presents recommendations for future research.

Main Findings

Data from five studies demonstrated the importance of UC in understanding individual differences in support providers' psychological distress. The essential findings are that (1) individuals high in UC appear not to benefit from providing support to others and externalised self-evaluation plays an important role in this

phenomenon, (2) high UC individuals are vulnerable to psychological distress in situations involving supporting others, (3) low self-efficacy concerning supporting others and the tendency to experience others' problem as one's own, together with externalised self-evaluation, underlie such vulnerability of UC to distress, and (4) UC is unlikely to be a gender-related construct as initially proposed.

1. Individuals high in UC appear not to benefit from providing support to others and externalised self-evaluation plays an important role in this phenomenon.

We proposed that UC is a particularly relevant individual difference variable in the context of providing support to others. Individuals high in UC perceive themselves as a helper to other people and hence, helping and caring for others is central to high UC individuals' self-identity. However, maintaining such a self-identity by providing support to others may be at the expense of high UC individuals' own health (for a review, see Helgeson & Fritz, 1998). In fact, it has been suggested that individuals characterized by high levels of UC can be expected to be most vulnerable to distress in situations that involve caregiving (Helgeson, 1993).

In Chapter 3, we conducted two studies with college students to examine whether supportive actions are related to support providers' psychological distress in similar ways for individuals high in UC and individuals low in UC, especially in the context of helping someone who is confronted with relatively minor daily hassles or problems (Study 3.1 and Study 3.2). The results hold consistently across the two studies such that UC shapes the association between the enacted daily supportive/unsupportive acts and providers' psychological distress. Specifically, giving support and refraining from unsupportive acts were found to be associated with less distress among low UC individuals. On the contrary, high UC individuals tended to report high levels of distress regardless of their supportive behaviours. In other words, individuals high in UC appear to have difficulties to benefit from providing support to others and tend to report psychological distress even though they are being kind and supportive to others.

In Chapter 4, we took a different perspective and examined the impact of support recipients' feedback in combination with support providers' level of UC on depressive mood. In that experimental study, participants were instructed to imagine themselves helping their friends with a household task. We manipulated the friend's feedback to examine whether the effect of self-evaluative feedback on participants' mood would alter as a function of UC. The results showed that although negative feedback from support recipients had a negative impact on all support providers, it affected high UC support providers more strongly than low UC support providers. Put differently, the findings indicate that high UC individuals are more sensitive to negative feedback than are low UC individuals while supporting others. This is consistent with the idea that UC individuals' helping acts are not out of empathic concern for others, but rather are ways to achieve and maintain positive relationship with others. In this case, receiving negative feedback from others could reflect failure in supporting others and may directly have threatened their self-identity as a helper.

In the same experiment, we also assessed participants' level of externalised self-evaluation to examine whether the moderation effect of UC on the feedback-distress link can be explained by their tendency to rely on others' opinions for self-evaluation. The results supported this notion. Our findings are consistent with the idea that individuals high in UC rely excessively on others' opinions to evaluate themselves (Helgeson & Fritz, 1998). This particular feature may predispose high UC people to experience negative psychological wellbeing regardless of what they do for others or how well they do it, especially when others show clearly unfavourable reactions. Even though the helping situation was hypothetical, it is important to note that our experiment is the first study in the literature that specifically examined the explanatory role of externalised self-evaluation in understanding the vulnerability of high UC individuals to negative psychological wellbeing in the context of providing support to someone else.

2. High UC individuals are vulnerable to psychological distress in situations involving supporting others.

We focused on spouses of kidney transplant patients and spouses of patients with end-stage renal disease (ESRD), and investigated the association between UC and support providers' psychological distress. ESRD and its treatments (i.e., kidney transplant and dialysis) can increase the dependency of the ill individuals on their spouses. Simultaneously, spouses may carry more responsibilities and accommodate new roles such as being the primary caretaker. Given that being a helper is central to high UC individuals' self-identity and that high UC people have difficulties to handle such a caring role without jeopardizing their own health, it is plausible to expect that situations like this could be especially risky for spouses high in UC. The results of Chapter 5 support this idea. UC was positively associated with distress in both spousal samples.

Moreover, we were able to compare the differences between the UC-distress correlations between students (Chapter 3) and spousal caregivers (Chapter 5). Interestingly, UC appears to be a distress-prone personality that has stronger associations with psychological health in caregiving spousal populations than in non-caregiving student populations. Specifically, it was found that, comparing to the student sample ($r = .18$, $N = 263$), the UC-distress association was significantly stronger ($p < .05$) in spouses of dialysis patients ($r = .41$, $N = 88$) and somewhat stronger, albeit not significantly ($p > .05$), in spouses of transplant patients ($r = .27$, $N = 221$).

In other words, situations involving chronic processes of support provision seem to be especially risky for high UC individuals. This is perhaps not surprising after all because the two core facets of UC concerns self-identifying as a helper and the extreme orientation towards others. As a helper, high UC individuals have a strong motivation to give to others and to maintain relationships with whom they interact. However, the extreme orientation toward others keeps them thinking and acting in maladaptive manners and as a consequence high UC individuals

appear to be unable to fulfil the caring-role without the cost of their own health. While a chronic disease like ESRD develops slowly over the years, it is common that support and care are needed to be provided over an extended period of time in a close relationship. In such a situation, high UC individuals are continuously challenged by the activation of their caring-role on the one hand and their lack of ability to fulfil it on the other. Consequently, they become vulnerable to psychological distress in situations involving supporting others.

It is worth noting that the strength of the relationships and the amount of variance explained was modest. However, we do not assert that personality, in this case UC, explains all psychological differences in support providers' distress, but rather that it matters. There are many other factors that may also contribute to support providers' psychological health, such as patient characteristics, characteristics of the care, and available social resources.

3. Low self-efficacy concerning supporting others and the tendency to experience others' problem as one's own, together with externalised self-evaluation, underlie the vulnerability of UC to distress.

While high UC individuals are at risk to psychological distress in situations involving supporting others, we know very little about the potential underlying mechanisms for this phenomenon. There are a few studies in the literature that investigated the pathways linking UC to poor psychological wellbeing, but only in the context of facing one's own problem (e.g., being ill). Mechanisms studied were mostly behavioural factors (e.g., intrusiveness and being overly nurturant) (Helgeson, 2003a) and to a lesser extent cognitive factors (e.g., perceived personal control and self-esteem). Building on this previous work, this thesis focused on three cognitive factors that might be responsible for the manifestation of high levels of psychological distress in high UC individuals, i.e., externalised self-evaluation, experiencing partner's illness as one's own and low self-efficacy concerning support provision. We investigated whether through these underlying mechanisms UC may exert negative effects on support providers' psychological wellbeing by focusing on spouses of ESRD patients (Chapter 5).

Our first main finding suggests that externalised self-evaluation is responsible for UC individuals' greater sensitivity to negative feedback from others. This process may (partly) explain the higher manifestation of psychological distress in high UC people as compared to low UC people. In Chapter 5, we took a different perspective. Regardless others' feedback, the excessive tendency to base one's self-evaluation on others' opinions is also reflective of low self-regard and may lead to unstable self-esteem. As both of them are the indicators of depression in and of themselves (Roberts, Gotlib, & Kassel, 1996; Roberts & Kassel, 1997; Roberts & Monroe, 1992), an explanatory role of externalised self-evaluations in the manifestation of UC spouses' psychological distress thereby is plausible.

Moreover, it is known that individuals high in UC are likely to become overinvolved with others' problems and take it personally (Helgeson, 2003a; Helgeson & Fritz, 1998). They also appear to have low self-esteem in general as well as low self-esteem in specific domains such as physical appearance (Amanatullah, Morris, & Curhan, 2008; Fritz & Helgeson, 1998; Helgeson, 2003b; Helgeson, Escobar, Siminerio, & Becker, 2007). Because both classes of cognitive features have negative consequences (e.g., increased psychological distress), in Chapter 5, we further proposed that in addition to externalised self-evaluation, the tendencies of experiencing partner's illness as one's own and low self-efficacy concerning support provision may also offer explanations for the relatively high prevalence of negative psychological wellbeing among high UC individuals. Eventually, a multi-mediation model including both variables and externalised self-evaluation was tested in two different spousal samples. The findings supported this model. UC was positively associated with externalised self-evaluation and the tendency of taking the partner's problem as one's own, and negatively associated with self-efficacy regarding support provision. Together, these three mediators explained the association between UC and spouses' psychological distress.

Based on the last two main findings (2 and 3), a paradoxical portrait of a high UC individual can be drawn: Someone who strives to fulfil his or her role as a helper, yet persistently thinks and probably also behaves in ways that undermine this role, and consequently his or her wellbeing. Moreover, because ESRD is a chronic disease, caring for ESRD patients can be a chronic process too. Since high UC individuals' maladaptive modes of thought are attached to and activated by caring situations, unless such situations alter, these maladaptive cognitions can be resistant to change. In this way, these negative cognitions of UC may contribute not only to the occurrence of high UC individuals' own distress, but also the maintenance of distress.

Another issue that warrants some discussion is the generalizability of the multi-mediator model. For instance, to what extent the UC-cognitive factors-distress model can be generalized to other groups and populations? Would the model be different if support provision is no longer a central aspect of the context (e.g., dealing with one's own problem)? In our model, two of the mediators are closely attached to the context of support provision. Low self-efficacy concerning supporting others reflects a threat to one's self-identity as a helper, whereas the tendency to experience others' problem as one's own reflects the difficulty to execute the caring role without being overinvolved. In comparison to these two factors, externalised self-evaluation fits in much broader contexts. Past research has demonstrated the mediating role of externalised self-evaluation also in studies of psychological distress among college students as well as adolescents (Fritz & Helgeson, 1998). Nonetheless, we believe that our model might be valid and yield comparable results in other populations where support provision is important (e.g., nurses, teachers and social workers).

4. UC is unlikely to be a gender-related construct as initially proposed.

In addition to the substantial findings above, our set of studies showed inconsistent results with regard to the relation of UC to sex. UC was originally introduced as a gender related construct suggesting that women were likely to exhibit higher levels of UC than were men (Helgeson, 2003a; Helgeson & Fritz, 1998). However, a review of the literature shows rather mixed results with some studies showing evidence of sex differences in UC, whereas others do not (see Table 1.1). This thesis yielded a similar pattern comparing to the literature, with correlations varying from $-.08$ (*n.s.*) to $-.30$ ($p < .01$). One should keep in mind that we were able to test the gender difference with a well-balanced gender distribution in all spouse samples. The fact that we consistently found relatively low correlations ($-.11$ and $-.28$) in these spouse samples may question the conceptualization of UC in terms of its gender descent.

Methodological Strengths and Limitations

Our research has several methodological strengths. First, the studies have relatively large samples collected from a variety of populations. Second, both cross-sectional surveys and an experimental design were applied in this thesis. The cross-sectional design is a relatively economical method in relation to time and resources, which allowed for the examination of associations between UC, the provision of support, and distress. Moreover, it shed light on underlying mechanisms of the association between UC and support providers' psychological distress. As with all cross-sectional studies, one can discuss the results as associations among the constructs, but cannot establish the causal direction of an association. Therefore, it is premature to draw conclusions of causality concerning the enacted supportive acts-psychological distress link and to claim empirical proof of the sequences of the mediation pathways. Furthermore, the experiment was designed to test how external feedback affects mood as a function of UC and externalised self-evaluation. Although the causal relationship of UC and externalised self-evaluation was not directly established, it does shed light on the underly-

ing process explaining why high UC individuals may be prone to poor psychological wellbeing. Third, statistical analyses based on a bootstrapping procedure were applied to test the mediated-moderation model and the multi-mediator model. This is a more sophisticated analytical procedure that has several advantages in terms of its detective power comparing to traditional analytical approaches such as the causal step approach and the Sobel test (Baron & Kenny D.A., 1986; Sobel, 1982; Sobel, 1986).

One limitation that warrants further discussion is the exclusive reliance on self-report methods for measuring study variables which may raise concerns regarding self-report bias. For instance, some evidences suggested that self-report support can be different from observer-report support (Bolger, Zuckerman, & Kessler, 2000; Dunkel-Schetter, Blasband, Feinstein, & Bennett, 1992). Moreover, high UC individuals may provide support in different ways than do low UC individuals and may respond to scale items that are anchored as 'rarely' via 'very' to 'very often' in different ways. The same score may indicate different actual amounts of support: 'often' might mean little actual support in low UC individuals, while it indicates very much support in high UC individuals. Thus, using alternative methods such as peer report or observational methods to measure support provision might be of interest for future study to consider. Whereas variables like UC, externalised self-evaluation, and psychological distress are concepts reflecting attitudes and cognitive processes, one possibility would be the application of structured interviews. Although it can be expensive and subject to error interviewer bias, such attempt has its advantages (e.g., clarifying ambiguities and checking inconsistencies and misinterpretations) which consequently can make a significant contribution to the validity of current results.

Implications and Future Research

Implications

First, our studies were the first to examine the construct of UC and its role in support provision related distress. The findings paint a bleak picture for those high in

UC and thereby shed light on the recognition of a potentially important personality characteristic in understanding individual differences in support providers' psychological distress.

Furthermore, we provided more insight into the underlying mechanisms regarding the UC-psychological distress association with three cognitive factors. Although the causal sequences of the pathways need to be verified in future studies, these variables provide promising ideas for cognitive treatment with intention to reduce high UC spouses' psychological distress. For instance, high UC support providers may benefit from cognitive techniques that balance the extreme focus on others' opinions with awareness of self-worth and mental exercises that improve domain specific self-efficacy and reduce the sensitivity toward unfavourable comments. Moreover, an effort can be made to encourage the support recipients (i.e., patients) to develop more positive communication skills within the relationship with the high UC individuals. These strategies might be useful for high UC individuals to reduce their feelings of distress.

Moreover, our results underpin the importance of externalised self-evaluation in the manifestation of distress in high UC individuals. More importantly, our research extends the understanding of UC by showing that high UC individuals may not interpret others' opinions more negatively rather it is their sensitivity to others' negative evaluation that matters. This parallels the idea that individuals high in UC exhibit high fear of negative evaluation by others (Helgeson & Fritz, 1998). So perhaps for high UC individuals who place enormous emphasis on how others think about them and form their self-view accordingly, only others' approval may keep them from developing a pessimistic self-view and consequently negative psychological wellbeing. Or put differently, the fact that high UC individuals are as likely to accept reassurance from others (e.g., positive feedback) than low UC individuals indicates that explicitly conveying positive evaluations to high UC individuals may be an effective way to compensate for the deleterious effect of excessively focusing on others on their wellbeing.

Future Research

Given our studies are among the first to take UC into account as an important factor in support providers' distress, the generalizability and stability of the findings must await further research.

Moreover, future research might benefit from identifying effective distress-reduction strategies for high UC by taking into account both cognitive and behavioural factors. This thesis primarily focuses on cognitive factors reflecting 'caring-role self-identity' and 'extreme orientation towards others' by which UC may inhibit the beneficial effects of support provision. Other behavioural factors reflecting the extreme focus on others such as interpersonal relationship difficulties (e.g., being easily exploitable and inhibiting self-expressiveness to avoid conflict) have also been suggested as indicators of poor wellbeing (Fritz & Helgeson, 1998; Helgeson, 2003a; Helgeson & Fritz, 1998; Helgeson & Fritz, 1999). In fact, by enacting a wide range of maladaptive behaviours, high UC individuals may continuously frustrate and irritate the people they interact with and thus elicit rejections from others. In this way they create around themselves an environment that guarantees the occurrence of negative feedback. Hence, future research should consider taking these potential behavioural factors into account in order to capture a more complete picture of the underlying process of vulnerability of high UC individuals to poor psychological outcomes when facing others' problems. Related to this, the overinvolvement in others' problems and subjugation of one's own needs to the needs of others could also lead to negative physical health consequences. Additional studies comprising outcome variables representing indicators of physical health would contribute to the refinement of the model as well.

Another issue that has not been explored in this thesis, but seems to be of interest to investigate is how the support recipients actually evaluate high UC individuals in the role of helper. For example, do recipients value high UC providers and do they show appreciation as high UC support providers desire? Previous research demonstrated that the helping act from high UC individuals is not out of an altruistic concern for others. Instead, their excessive drive to provide help to

others may be a means of reaffirming their identity as one who is helpful and an attempt to enhance their worth in the eyes of others (Helgeson & Fritz, 1998). It is known that high UC individuals tend to be overinvolved in their relationships with others, ruminate about others' problems, and base their self-esteem on how others perceive them. Also, UC has been associated with a set of problematic interpersonal behaviours (e.g., being overprotective) across medical and non-medical populations. As such, we would expect support recipients not to be very positive or pleased about high UC support providers.

As discussed in the introduction, UC has two essential facets: the extreme orientation towards others and the lack of orientation towards oneself. We studied the first facet with respect to other people's problems. Specifically, our data underscore the importance of the 'extreme focus on others' aspect of UC in the UC-psychological distress association when facing others' problems. The 'lack of orientation towards oneself' has been studied mainly with respect to people's own problems. For example, earlier research on adjustment to heart diseases has shown that high UC cardiac patients tend to fail to adhere to exercise regimen and reported worse mental functioning and greater depression than low UC cardiac patients (Fritz, 2000). Similarly, in studies of adolescents with diabetes, disturbed eating behaviour was found to explain the link between UC and psychological distress (Helgeson et al., 2007). Furthermore, in a study of adjustment to breast cancer, women with high levels of UC were less able than their low UC counterparts to restore the damage to self-esteem that breast cancer poses, which in turn resulted in poor mental health (Helgeson, 2003b). This past work adopted a framework where variables reflecting the 'self-neglect' facet of UC (e.g., unable to take care of their own health and to attend to themselves) successfully explained why UC people evidence poor psychological wellbeing when faced with a stressful event of their own. In sum, based on past research and our own studies, a picture emerges that, in different contexts (dealing with own vs. others' problem), different facets of UC make people vulnerable to experience distress.

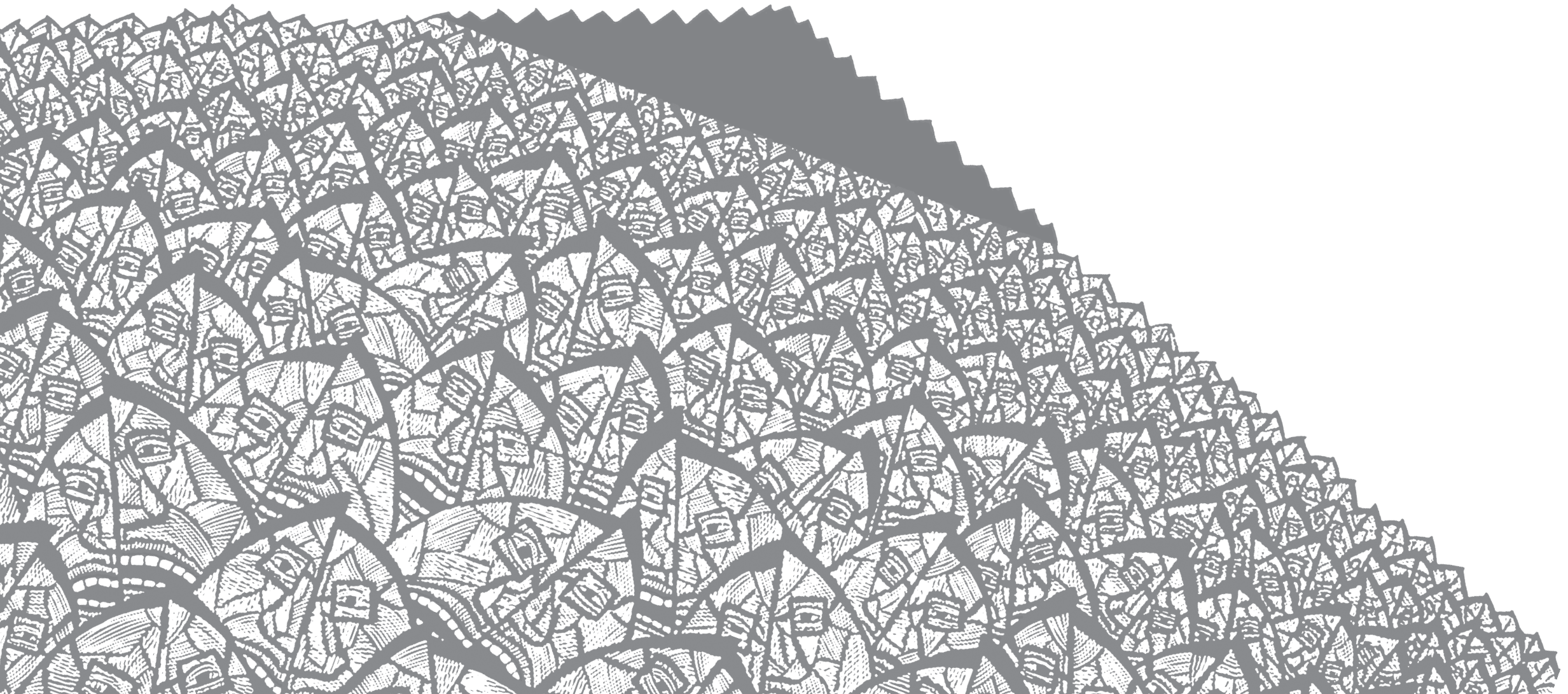
It is worth to clarify that the reason we separately discussed the two sets of mechanism linking UC to health is out of the purpose of a clear text structure. We agree with the past theoretical claim that they are fundamentally inseparable, i.e., the focus on others leads to self-neglect and neglecting the self drives high UC individuals to focus on others even more (Helgeson, 2003a; Helgeson & Fritz, 1998). What matters is that one set mechanism would have stronger explanatory power than the other depending on the context of the study. When situations highlight an interaction with others, it is the factor related to focus on others showing the most explanatory power; whereas when situations involve dealing with one's own problem, it is the factor related to lacking of self-concern that matters more. To obtain greater depth of the theoretical insight on UC's manifestation to negative psychological wellbeing, future research might benefit from studying both facets (i.e., focus on others and neglecting the self) with respect to dealing with others' problems.

Finally, as pointed out earlier in the methodological limitations, more experimental studies are necessary before we can draw any conclusion regarding the causal sequences of how UC influences psychological distress. Moreover, as the scenario applied in our experiment was hypothetical, future research utilizing an actual support provision design may clarify the direction of the cause and effect, and obtain greater validity of the moderation and mediation model.

Conclusions

This thesis investigated individual differences in support providers' psychological distress by focusing on a personality characteristic – unmitigated communion (UC). Our studies have shown that UC has important implications for individuals' wellbeing such that high UC individuals are at greater risk for experiencing psychological distress than those low in UC despite how helpful and supportive they are. Moreover, we have successfully identified an internal working model that explains the link between UC and psychological distress (i.e., externalised self-evaluation, experiencing partner's illness as one's own, and low self-efficacy concerning support provision).

REFERENCE LIST



-
- Adams, P.L. (2006). Long-term patient survival: Strategies to improve overall health. *American Journal of Kidney Diseases*, *47*, S65-S85.
- Aiken, L.S. & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, London: Sage.
- Amanatullah, E.T., Morris, M.W., & Curhan, J.R. (2008). Negotiators who give too much: Unmitigated communion, relational anxieties, and economic costs in distributive and integrative bargaining. *Journal of Personality and Social Psychology*, *95*, 723-738.
- Aron, A., Aron, E.N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*, 596-612.
- Aubé, J. (2008). Balancing concern for other with concern for self: Links between unmitigated communion, communion, and psychological well-being. *Journal of Personality*, *76*, 101-133.
- Bakan, D. (1966). *The duality of human existence*. Chicago: Rand McNally.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, *84*, 191-215.
- Barnett, P.A., & Gotlib, I.H. (1988). Psychosocial functioning and depression: Distinguishing among antecedents, concomitants, and consequences. *Psychological Bulletin*, *104*, 97-126.
- Baron, R.M., & Kenny D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.

Beck, R., Taylor, C., & Robbins, M. (2003). Missing home: Sociotropy and autonomy and their relationship to psychological distress and homesickness in college freshmen. *Anxiety Stress and Coping, 16*, 155-166.

Belasco, A.G., & Sesso, R. (2002). Burden and quality of life of caregivers for hemodialysis patients. *American Journal of Kidney Diseases, 39*, 805-812.

Blood, G.W., & Simpson, K.C. (1994). Spouses of individuals with laryngeal cancer: Caregiver strain and burden. *Journal of Communication Disorders, 27*, 19-35.

Bolger, N., Zuckerman, A., & Kessler, R.C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79*, 953-961.

Bookwala, J., & Schulz, R. (1998). The role of neuroticism and mastery in spouse caregivers' assessment of and response to a contextual stressor. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences, 53*, 155-164.

Bookwala, J., & Schulz, R. (2000). A comparison of primary stressors, secondary stressors, and depressive symptoms between elderly caregiving husbands and wives: The caregiver health effects study. *Psychology and Aging, 15*, 607-616.

Brown, G.W., & Harris, T. (1978). *Social origins of depression: A study of psychiatric disorder in women*. London: Tavistock Publications.

Bruch, M. (2002). The relevance of mitigated and unmitigated agency and communion for depression vulnerabilities and dysphoria. *Journal of Counseling Psychology, 49*, 449-459.

Brunier, G., Graydon, J., Rothman, B., Sherman, C., & Liadsky, R. (2002). The psychological well-being of renal peer support volunteers. *Journal of Advanced Nursing, 38*, 40-49.

Brunier, G.M., & McKeever, P.T. (1993). The impact of home dialysis on the family: Literature review. *American Nephrology Nurses' Association, 20*, 653-659.

Burke, P. (1991). Identity processes and social stress. *American Sociological Review, 56*, 836-849.

Burke, P., Stets, J., & Pirog-Good, M. (1989). Gender identity, self-esteem, and physical and sexual abuse in dating relationships. *Social Psychology Quarterly, 51*, 272-285.

Buss, D. (1990). Unmitigated agency and unmitigated communion: An analysis of the negative components of masculinity and femininity. *Sex Roles, 22*, 555-568.

Carey, P.J., Oberst, M.T., McCubbin, M.A., & Hughes, S.H. (1991). Appraisal and caregiving burden in family members caring for patients receiving chemotherapy. *Oncology Nursing Forum, 18*, 1341-1348.

Cantor, M.H. (1983). Strain among caregivers: A study of experience in the United States. *Gerontologist, 23*, 597-603.

Carton, J.S., Kessler, E.A., & Pape, C.L. (1999). Nonverbal decoding skills and relationship well-being in adults. *Journal of Nonverbal Behavior, 23*, 91-100.

Clark, M.S. & Reis, H.T. (1988). Interpersonal processes in close relationships. *Annual Review of Psychology, 39*, 609-672.

Coyne, J.C. (1976). Depression and response of others. *Journal of Abnormal Psychology, 85*, 186-193.

Coyne, J.C., & Smith, D.A.F. (1991). Couples coping with a myocardial-infarction - A contextual perspective on wives distress. *Journal of Personality and Social Psychology, 61*, 404-412.

Crocker, J., & Wolfe, C.T. (2001). Contingencies of self-worth. *Psychological Review*, *108*, 593-623.

Dakof, G.A. & Taylor, S.E. (1990). Victims perceptions of social support - What is helpful from whom. *Journal of Personality and Social Psychology*, *58*, 80-89.

Danoff-Burg, S., Mosher, C., & Grant, C. (2006). Relations of agentic and communal personality traits to health behavior and substance use among college students. *Personality and Individual Differences*, *40*, 353-363.

Danoff-Burg, S., Revenson, T., Trudeau, K.J., & Paget, S. (2004). Unmitigated communion, social constraints, and psychological distress among women with rheumatoid arthritis. *Journal of Personality*, *72*, 29-46.

Dobbels, F., Skeans, M.A., Snyder, J.J., Tuomari, A.V., Maclean, J.R., & Kasiske, B.L. (2008). Depressive disorder in renal transplantation: An analysis of medicare claims. *American Journal of Kidney Diseases*, *51*, 819-828.

Dunkel-Schetter, C., Blasband, D. E., Feinstein, L.G., & Bennett, H. (1992). Elements of supportive interactions: When are attempts to help effective? In S.Spacapan & S. Oskamp (Eds.), *Helping and being helped: naturalistic studies*. Newbury Park, Calif: Sage Publications.

Folkman, S., Chesney, M.A., & Christopherrichards, A. (1994). Stress and coping in caregiving partners of men with AIDS. *Psychiatric Clinics of North America*, *17*, 35-53.

Fritz, H. (2000). Gender-linked personality traits predict mental health and functional status following a first coronary event. *Health Psychology*, *19*, 420-428.

Fritz, H., & Helgeson, V.S. (1998). Distinctions of unmitigated communion from communion: Self-neglect and overinvolvement with others. *Journal of Personality and Social Psychology*, *75*, 121-140.

Fritz, H., Nagurney, A., & Helgeson, V.S. (2003). Social interactions and cardiovascular reactivity during problem disclosure among friends. *Personality and Social Psychology Bulletin*, *29*, 713-725.

George, L.K., & Gwyther, L.P. (1986). Caregiver well-being: A multi-dimensional examination of family caregivers of demented adults. *Gerontologist*, *26*, 253-259.

Ghaed, S., & Gallo, L. (2006). Distinctions among agency, communion, and unmitigated agency and communion according to the interpersonal circumplex, five-factor model, and social-emotional correlates. *Journal of Personality Assessment*, *86*, 77-88.

Gilliam, C.M., & Steffen, A.M. (2006). The relationship between caregiving self-efficacy and depressive symptoms in dementia family caregivers. *Aging & Mental Health*, *10*, 79-86.

Given, B., Stommel, M., Collins, C., & Given, C.W. (1990). Responses of elderly spouse caregivers. *Research in Nursing & Health*, *13*, 77-85.

Gleason, M.E.J., Iida, M., Bolger, N., & Shrout, P.E. (2003). Daily supportive equity in close relationships. *Personality and Social Psychology Bulletin*, *29*, 1036-1045.

Goldberg, D.P., & Hillier, V.F. (1979). Scaled version of the general health questionnaire. *Psychological Medicine*, *9*, 139-145.

Hagedoorn, M., Sanderman, R., Bolks, H.N., Tuinstra, J., & Coyne, J.C. (2008). Distress in couples coping with cancer: A meta-analysis and critical review of role and gender effects. *Psychological Bulletin*, *134*, 1-30.

Hagedoorn, M., Sanderman, R., Buunk, B., & Wobbes, T. (2002). Failing in spousal caregiving: The 'identity-relevant stress' hypothesis to explain sex differences in caregiver distress. *British Journal of Health Psychology*, *7*, 481-494.

Hawkins, M.W., Carrere, S., & Gottman, J.M. (2002). Marital sentiment override: Does it influence couples' perceptions? *Journal of Marriage and the Family*, *64*, 193-201.

Hayes, A.F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*, 408-420.

Helgeson, V.S. (1993). Implications of agency and communion for patient and spouse adjustment to a first coronary event. *Journal of Personality and Social Psychology*, *64*, 807-816.

Helgeson, V.S. (1994). Relation of agency and communion to well-being: Evidence and potential explanations. *Psychological Bulletin*, *116*, 412-428.

Helgeson, V.S. (2003a). Gender-related Traits and Health. In J. Suls & K.A. Wallston (Eds.), *Social psychological foundations of health and illness* (pp. 367-394). Malden, MA: Blackwell.

Helgeson, V.S. (2003b). Unmitigated communion and adjustment to breast cancer: Associations and explanations. *Journal of Applied Social Psychology*, *33*, 1643-1661.

Helgeson, V.S., Escobar, O., Siminerio, L., & Becker, D. (2007). Unmitigated communion and health among adolescents with and without diabetes: The mediating role of eating disturbances. *Personality and Social Psychology Bulletin*, *33*, 519-536.

Helgeson, V.S., & Fritz, H. (1998). A theory of unmitigated communion. *Personality and Social Psychology Review*, *2*, 173-183.

Helgeson, V.S., & Fritz, H. (1999). Unmitigated agency and unmitigated communion: Distinctions from agency and communion. *Journal of Research in Personality*, *33*, 131-158.

Helgeson, V.S., & Fritz, H. (2000). The implications of unmitigated agency and unmitigated communion for domains of problem behavior. *Journal of Personality*, *68*, 1031-1057.

Helgeson, V.S., Siminerio, L., Escobar, O., & Becker, D. (2009). Predictors of metabolic control among adolescents with diabetes: A 4-year longitudinal study. *Journal of Pediatric Psychology*, *34*, 254-270.

Hennig, K.H., & Walker, L.J. (2008). The darker side of accommodating others: Examining the interpersonal structure of maladaptive constructs. *Journal of Research in Personality*, *42*, 2-21.

Hinnen, C., Hagedoorn, M., Sanderman, R., & Ranchor, A.V. (2007). The role of distress, neuroticism and time since diagnosis in explaining support behaviors in partners of women with breast cancer: Results of a longitudinal analysis. *Psycho-Oncology*, *16*, 913-919.

Hirokawa, K. & Dohi, I. (2007). Agency and communion related to mental health in Japanese young adults. *Sex Roles*, *56*, 517-524.

Holahan, C., & Spence, J. (1980). Desirable and undesirable masculine and feminine traits in counseling clients and unselected students. *Journal of Consulting and Clinical Psychology, 48*, 300-302.

Hooker, K., Monahan, D., Shifren, K., & Hutchinson, C. (1992). Mental and physical health of spouse caregivers: The role of personality. *Psychology and Aging, 7*, 367-375.

Hooker, K., Monahan, D.J., Bowman, S.R., Frazier, L.D., & Shifren, K. (1998). Personality counts for a lot: Predictors of mental and physical health of spouse caregivers in two disease groups. *Journal of Gerontology, 53B*, 73-85.

House, J.S., Landis, K.R., & Umberson, D. (1988). Social relationships and health. *Science, 241*, 540-545.

Hunter, K.I. & Linn, M.W. (1981). Psychosocial differences between elderly volunteers and non-volunteers. *International Journal of Aging & Human Development, 12*, 205-213.

Ingersoll-Dayton, B., & Raschick, M. (2004). The relationship between care-recipient behaviors and spousal caregiving stress. *Gerontologist, 44*, 318-327.

Jack, D.C., & Dill, D. (1992). The silencing the self scale - Schemas of intimacy associated with depression in women. *Psychology of Women Quarterly, 16*, 97-106.

Jin, L., van Yperen, N., Sanderman, R., and Hagedoorn, M. (2009). *Unmitigated communion and depressive mood: A mediated moderation model*. Unpublished manuscript

Jin, L., van Yperen, N., Sanderman, R., & Hagedoorn, M. (2010). Depressive symptoms and unmitigated communion in support providers. *European Journal of Personality, 24*, 56-70.

Kernis, M.H., Whisenhunt, C.R., Waschull, S.B., Greenier, K.D., Berry, A.J., Herlocker, C.E. et al. (1998). Multiple facets of self-esteem and their relations to depressive symptoms. *Personality and Social Psychology Bulletin, 24*, 657-668.

Kessler, R.C., McLeod, J.D., & Wethington, E. (1985). The costs of caring: A perspective on the relationship between sex and psychological distress. In I.G. Sarason & B.R. Sarason (Eds.), *Social support: theory, research and applications* (pp. 491-506). Dordrecht, The Netherlands: Nijhoff.

Kluger, A.N., Lewinsohn, S., & Aiello, J.R. (1994). The influence of feedback on mood: Linear effects on pleasantness and curilinear effects on arousal. *Organizational behavior and human decision processes, 60*, 276-299.

Knoll, N., Kienle, R., Bauer, K., Pffueller, B., & Luszczynska, A. (2007). Affect and enacted support in couples undergoing in-vitro fertilization: When providing is better than receiving. *Social Science & Medicine, 64*, 1789-1801.

Koerner, S.S., Kenyon D.B., & Shirai, Y. (2009). Caregiving for elder relatives: Which caregivers experience personal benefits/gains? *Archives of Gerontology and Geriatrics, 48*, 238-245.

Krause, N., Herzog, A.R., & Baker, E. (1992). Providing support to others and well-being in later life. *Journals of Gerontology, 47*, 300-311.

Kuijer, R.G., Ybema, J.F., Buunk, B.P., De Jong, G.M., Thijs-Boer, F., & Sanderman, R. (2000). Active engagement, protective buffering, and overprotection: Three ways of giving support by intimate partners of patients with cancer. *Journal of Social and Clinical Psychology, 19*, 256-275.

Kurtz, M.E., Kurtz, J.C., Given, C.W., & Given, B. (1997). Predictors of postbereavement depressive symptomatology among family caregivers of cancer patients. *Supportive Care in Cancer, 5*, 53-60.

Lakey, B., Tardiff, T.A., & Drew, J.B. (1994). Negative social interactions - Assessment and relations to social support, cognition, and psychological distress. *Journal of Social and Clinical Psychology, 13*, 42-62.

Leary, M.R., Tambor, E.S., Terdal, S.K., & Downs, D.L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518-530.

Lowry, M.R., & Atcherson, E. (1984). Spouses-assistant's adjustment to home hemodialysis. *Journal of Chronic Diseases, 37*, 293-300.

Lubart, W. (1993). Gender differences in coping strategies and associated distress in family caregivers of frail elders. *Dissertation Abstracts International, 53*, 4961.

Luks, A. (1988). Helper's high. *Psychology Today, 39-40*.

MacKinnon, D.P. (2000). Contrasts in multiple mediator models. In J.S. Rose, L. Chassin, C.C. Presson, & S.J. Sherman (Eds.), *Multivariate applications in substance use research* (pp. 141-160). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Miller, B., Campell, R.T., Farran, C.J., Kaufman, J.E., & Davis, L. (1995). Race, control, mastery, and caregiver distress. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences, 50*, s374-s382.

Monahan, D.J., & Hooker, K. (1995). Health of spouse caregivers of dementia patients: The role of personality and social support. *Social Work, 40*, 305-314.

Montgomery, R.J.V., Gonyea, J.G., & Hooyman, N.R. (1985). Caregiving and the experience of subjective and objective burden. *Family Relations, 34*, 19-26.

Moore, B.S., Underwood, B., & Rosenhan, D.L. (1973). Affect and altruism. *Developmental Psychology, 8*, 99-104.

Morrison, R. & O'Connor, R.C. (2005). Predicting psychological distress in college students: The role of rumination and stress. *Journal of Clinical Psychology, 61*, 447-460.

Mowbray, C.T., Moxley, D.P., Thrasher, S., Bybee, D., McCrohan, N., Harris, S. et al. (1996). Consumers as community support providers: Issues created by role innovation. *Community Mental Health Journal, 32*, 47-67.

Musick, M.A. & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science & Medicine, 56*, 259-269.

Nagurney, A. (2005). The effects of unmitigated communion, life events, and interpersonal reactivity among women with fibromyalgia. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 66*, 3467.

Nagurney, A.J. (2007). The effects of relationship stress and unmitigated communion on physical and mental health outcomes. *Stress and Health, 23*, 267-273.

Nagurney, A.J. (2008). The effects of unmitigated communion and life events among women with fibromyalgia syndrome. *Journal of Health Psychology, 13*, 520-528.

Nijboer, C., Tempelaar, R., Sanderman, R., Triemstra, M., Spruijt, R., & van den Bos, G. (1998). Cancer and caregiving: The impact on the caregiver's health. *Psycho-Oncology, 7*, 3-13.

Nijboer, C., Triemstra, M., Tempelaar, R., Mulder, M., Sanderman, R., & van den Bos, G. (2000). Patterns of caregiver experiences among partners of cancer patients. *Gerontologist, 40*, 738-746.

Nijboer, C., Tempelaar, R., Triemstra, M., van den Bos, G.A.M., & Sanderman, R. (2001). The role of social and psychologic resources in caregiving of cancer patients. *Cancer, 91*, 1029-1039.

Nijboer, C., Triemstra, M., Tempelaar, R., Sanderman, R., & van den Bos, G.A.M. (1999). Determinants of caregiving experiences and mental health of partners of cancer patients. *Cancer, 86*, 577-588.

Northouse, L.L., & Swain, M.A. (1987). Adjustment of patients and husbands to the initial impact of breast cancer. *Nursing Research, 36*, 221-225.

Oberst, M.T., Thomas, S.E., Gass, K.A., & Ward S.E. (1989). Caregiving demands and appraisal of stress among family caregivers. *Cancer Nursing, 12*, 209-215.

Park, L.E., & Crocker, J. (2008). Contingencies of self-worth and responses to negative interpersonal feedback. *Self and Identity, 7*, 184-203.

Pinquart, M., & Sorensen, S. (2006). Gender differences in caregiver stressors, social resources, and health: An updated meta-analysis. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences, 61*, 33-45.

Piro, M., Zeldow, P., Knight, S., Mytko, J., & Gradishar, W. (2001). The relationship between agentic and communal personality traits and psychosocial adjustment to breast cancer. *Journal of Clinical Psychology in Medical Settings, 8*, 263-271.

Post, S.G. (2005). Altruism, happiness, and health: It's good to be good. *International Journal of Behavioral Medicine, 12*, 66-77.

Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods Instruments & Computers, 36*, 717-731.

Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.

Radloff, L. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.

Reis, M.F., Gold, D.P., Gauthier, S., Anders, D., & Markiewicz, D. (1994). Personality traits as determinants of burden and health complaints in caregiving. *International Journal of Aging & Human Development, 39*, 257-271.

Reynolds, K.A., Helgeson, V.S., Seltman, H., Janicki, D., Page-Gould, E., & Wardle, M. (2006). Impact of interpersonal conflict on individuals high in unmitigated communion. *Journal of Applied Social Psychology, 36*, 1595-1616.

Riessman, F. (1965). The helper therapy principle. *Social Work, 10*, 27-32.

Rietschlin, J. (1998). Voluntary association membership and psychological distress. *Journal of Health and Social Behavior, 39*, 348-355.

Riley, A., & Burke, P. (1995). Identities and self-verification in the small group. *Social Psychology Quarterly, 58*, 61-73.

Roberts, J.E., Gotlib, I.H., & Kassel, J.D. (1996). Adult attachment security and symptoms of depression: The mediating roles of dysfunctional attitudes and low self-esteem. *Journal of Personality and Social Psychology, 70*, 310-320.

Roberts, J.E., & Kassel, J.D. (1997). Labile self-esteem, life stress, and depressive symptoms: Prospective data testing a model of vulnerability. *Cognitive Therapy and Research, 21*, 569-589.

Roberts, J.E., & Monroe, S.M. (1992). Vulnerable self-esteem and depressive symptoms: Prospective findings comparing 3 alternative conceptualizations. *Journal of Personality and Social Psychology, 62*, 804-812.

Robinson, M.D., & Clore, G.L. (2001). Simulation, scenarios, and emotional appraisal: Testing the convergence of real and imagined reactions to emotional stimuli. *Personality and Social Psychology Bulletin, 27*, 1520-1532.

Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.

Russell, J.A., Weiss, A., & Mendelsohn, G.A. (1989). Affect grid - A single-item scale of pleasure and arousal. *Journal of Personality and Social Psychology, 57*, 493-502.

Sanderman, R., & Stewart, R. (1990). Assessment of psychological distress: Psychometric properties of the General Health Questionnaire (GHQ). *International Journal of Health Sciences, 1*, 195-202.

Saragovi, C., Aube, J., Koestner, R., & Zuroff, D. (2002). Traits, motives, and depressive styles as reflections of agency and communion. *Personality and Social Psychology Bulletin, 28*, 563-577.

Schmidt, N.B., & Joiner, T.E. (2004). Global maladaptive schemas, negative life events and psychological distress. *Journal of Psychopathology and Behavioral Assessment, 26*, 65-72.

Schmidt, N.B., Joiner, T.E.Jr., Young, J., & Telch, M.J. (1995). The schema questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of early maladaptive schemas. *Cognitive Therapy and Research, 19*, 295-321.

Schroevers, M.J., Sanderman, R., van Sonderen, E., & Ranchor, A.V. (2000). The evaluation of the center for epidemiologic studies depression (CES-D) scale: Depressed and positive affect in cancer patients and healthy reference subjects. *Quality of Life Research, 9*, 1015-1029.

Schulz, R., Vitaliano, P., & Williamson, G.M. (1990). Psychiatric and physical morbidity effects of caregivers of demented adults. *Journals of Gerontology, 45*, 181-191.

Schwartz, C., Meisenhelder, J.B., Ma, Y.S., & Reed, C. (2003). Altruistic social interest behaviors are associated with better mental health. *Psychosomatic Medicine, 65*, 778-785.

Schwartz, C.E., & Sendor, R.M. (1999). Helping others helps oneself: Response shift effects in peer support. *Social Science & Medicine, 48*, 1563-1575.

Seidlitz, L., Fujita, F., & Duberstein, P.R. (2000). Emotional experience over time and self-reported depressive symptoms. *Personality and Individual Differences, 28*, 447-460.

Shafer, A.B. (2006). Meta-analysis of the factor structures of four depression questionnaires: Beck, CES-D, Hamilton, and Zung. *Journal of Clinical Psychology, 62*, 123-146.

Shrauger, J.S. (1975). Response to evaluation as a function of self-perceptions. *Psychological Bulletin, 82*, 581-596.

Shrout, P.E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422-445.

Sobel, M.E. (1982). Asymptotic confidence in intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290-312). San Francisco: Jossey-Bass.

Sobel, M.E. (1986). Some new results on indirect effects and their standard errors in covariance structure models. In N. Tuma (Ed.), *Sociological methodology* (pp. 159-186). Washington, DC: American Sociological Association.

Stets, J., & Burke, P. (1994). Inconsistent self-views in the control identity model. *Social Science Research, 23*, 236-262.

Suls, J., Green, P., Rose, G., Lounsbury, P., & Gordon, E. (1997). Hiding worries from one's spouse: Associations between coping via protective buffering and distress in male post-myocardial infarction patients and their wives. *Journal of Behavioral Medicine, 20*, 333-349.

Swallow, S.R., & Kuiper, N.A. (1988). Social comparison and negative self-evaluations: An application to depression. *Clinical Psychology Review, 8*, 55-76.

Swann, W.B.Jr. (1990). To be adored or to be known: The interplay of self-enhancement and self-verification. In R.M. Sorrentino & E.T. Higgins (Eds.), *Handbook of motivation and cognition* (pp. 408-480). New York: Guilford Press.

Swann, W.B.Jr. (1996). *Self traps: The elusive quest for high self-esteem*. New York: Freeman.

Swann, W.B.Jr. (1997). The trouble with change: Self-verification and allegiance to the self. *Psychological Science, 8*, 177-180.

Tafarodi, R.W., & Swann, W.B. (1996). Individualism-collectivism and global self-esteem: Evidence for a cultural trade-off. *Journal of cross-cultural psychology, 27*, 651-672.

Thoits, P.A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior, 23*, 145-159.

Thoits, P.A. (1991). On merging identity theory and stress research. *Social Psychology Quarterly, 54*, 101-112.

Thoits, P.A. & Hewitt, L.N. (2001). Volunteer work and well-being. *Journal of Health and Social Behavior, 42*, 115-131.

Trudeau, K.J., Danoff-Burg, S., Revenson, T., & Paget, S. (2003). Agency and communion in people with rheumatoid arthritis. *Sex Roles, 49*, 303-311.

Underwood, B., Froming, W.J., & Moore, B.S. (1977). Mood, attention, and altruism - Search for mediating variables. *Developmental Psychology, 13*, 541-542.

van der Mei, S.F., Krol, B., van Son, W.J., de Jong, P.E., Groothoff, J.W., & van den Heuvel, W.J.A. (2006). Social participation and employment status after kidney transplantation: A systematic review. *Quality of Life Research, 15*, 979-994.

van Sonderen, E. (1993). *Het meten van sociale steun met de Sociale Steun Lijst - Interacties (SSL-I) en Sociale Steun Lijst - Discrepancies (SSL-D): Een handleiding. {The measurement of social support with the Social Support List - Interactions (SSL-I) and Social Support List (SSL-D): A manual}*. Groningen, The Netherlands: University of Groningen, Northern Centre for Healthcare Research.

van Yperen, N.W. (1996). Communal orientation and the burnout syndrome among nurses: A replication and extension. *Journal of Applied Social Psychology, 26*, 338-354.

van Yperen, N.W., Buunk, B.P., & Schaufeli, W.B. (1992). Communal orientation and the burnout syndrome among nurses. *Journal of Applied Social Psychology, 22*, 173-189.

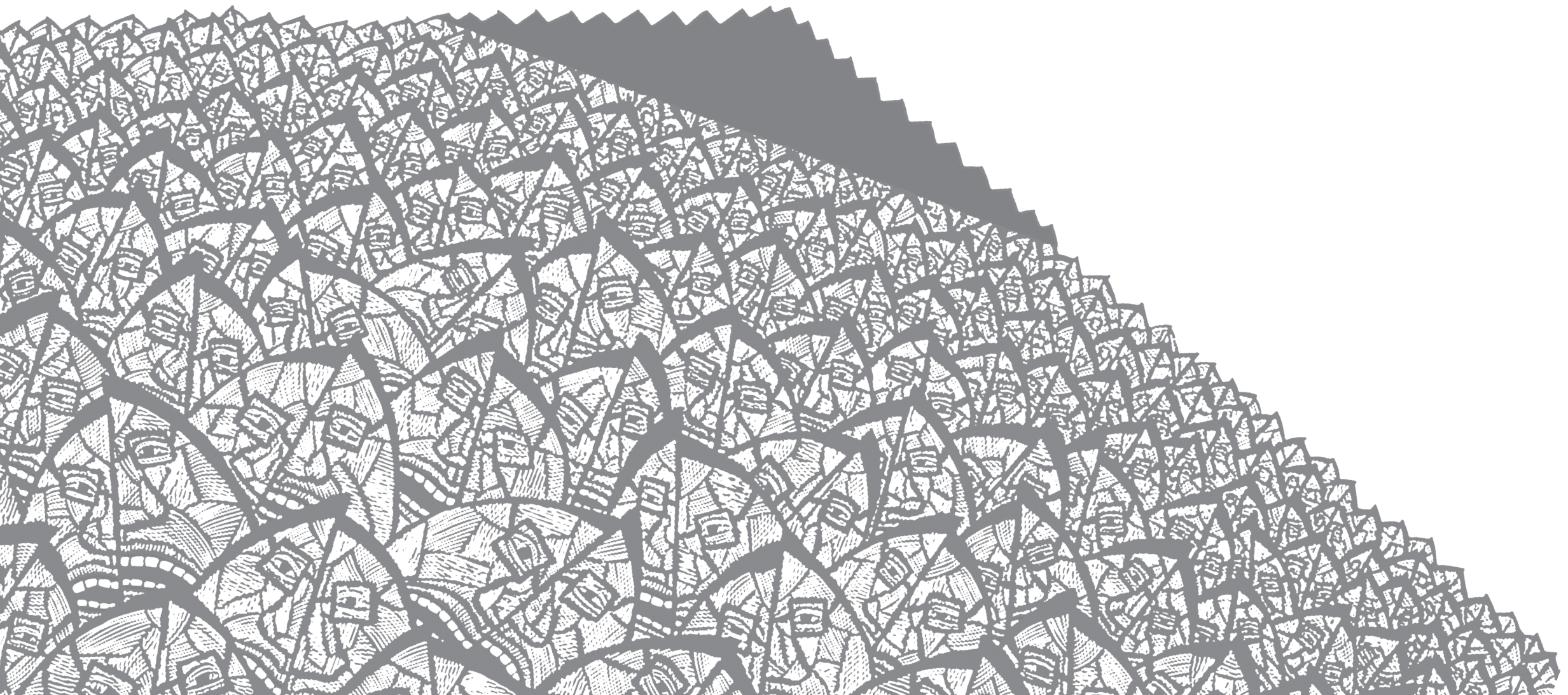
Weiss, R.L. (1980). Strategic behavioral marital therapy: Toward a model for assessment and intervention. In J.P.Vincent (Ed.), *Advances in family intervention, assessment and theory* (pp. 229-271). Greenwich, CT: JAI Press.

Williamson, G.M., & Clark, M.S. (1989). Providing help and desired relationship type as determinants of changes in moods and self-evaluations. *Journal of Personality and Social Psychology, 56*, 722-734.

Windsor, T.D., Anstey, K.J., & Rodgers, B. (2008). Volunteering and psychological well-being among young-old adults: How much is too much? *Gerontologist, 48*, 59-70.

Yinon, Y., & Landau, M.O. (1987). On the reinforcing value of helping-behavior in a positive mood. *Motivation and Emotion, 11*, 83-93.

SUMMARY



Supporting a close one in times of need is beneficial not only for the recipient of support, but also for the provider of support. However, under similar circumstances, support providers can show great variability in their psychological wellbeing. The goal of this thesis, thus, is to gain more insight into the phenomenon of differences in psychological wellbeing of support providers. Specifically, the present thesis investigates a personality trait, namely *unmitigated communion* (UC), and its role in support providers' psychological wellbeing.

Chapter 1 reviews past research on psychosocial factors that contribute to or reduce psychological wellbeing of support providers. Three categories of psychosocial factors are recognized as important for support providers' psychological wellbeing, i.e., the characteristics of the care, the social environment, and the characteristics of the support provider. This thesis focuses on the last source and emphasizes that research on a personality trait named unmitigated communion (UC) could be an important and valuable extension of the existing literature. UC is defined as a focus on others to the exclusion of the self. Hence, caring for others is a central aspect of high UC individuals' self-identity. However, fulfilling such a caring role is often at the cost of high UC individuals' own health. That is, high UC individuals' signature character – focus on others to the neglect of oneself – is accompanied by a series of problematic inter- and intra-personal cognitions and behaviours, including having excessive concern with others' opinions, placing others' needs before their own, being overly nurturant, and helping others to their own detriment. These factors can be important for the association between supportive acts and providers' psychological wellbeing. Chapter 1 ends with an outline of the thesis. Throughout the chapters, we focus on the maladaptive cognitions of UC and study the implication of UC for support providers' psychological wellbeing. The strength of this research is that we not only studied an aspect of UC that drew little attention in past research (i.e., caring role as self-identity), but also investigate its implication on support providers' wellbeing by putting emphasis on two different contexts: the context of providing support to a close one who encounters daily hassles and the context of providing support to a spouse who has a chronic illness.

Chapter 2 explains UC and its relevance to support providers' psychological wellbeing in more detail. Three essential features of UC, i.e., the *extreme orientation towards others*, the *lack of orientation towards oneself*, and the *caring role as self-identity* can be potentially harmful to support providers. The extreme orientation toward others refers to overinvolvement with others and externalised self-evaluation. Specifically, overinvolvement with others reflects ruminating about others' problems and internalizing these problems in such a way that others' distress becomes one's own distress; whereas externalised self-evaluation reflects a tendency of using the external environment to infer one's self-esteem. In other words, others' opinions have a profound effect on how high UC individuals evaluate themselves, to the extent that high UC people try to please others to secure others' approval. Such excessive reliance on others for self-esteem may predispose high UC individuals to distress given that high UC individuals also hold a strong belief that others view them negatively.

The lack of orientation towards oneself refers to high UC individuals' failure to regard themselves highly. Individuals high in UC have a pessimistic view toward themselves not only in general, but also in specific situations. Consequently, even when they support others, the extreme tendency of using external opinions to evaluate the self keeps high UC individuals from developing a positive sense of the self and consequently, benefiting from providing support.

Last, high UC individuals view themselves as a helper who is needed by others. However, the motivation that powers their supportive acts is to look good in the eyes of others and to maintain positive relationships with whom they interact rather than having genuine empathic concerns for others. Moreover, having a self-identity of being a helper, high UC individuals seem to set the bar of caring for others so high that regardless how hard they try, they are inclined to fail in adequate support provision. Altogether, the caring role as self-identity, too, sets the tone for high UC individuals' likelihood to experiencing psychological distress while supporting others.

Chapter 3 studied the role of UC in the context of providing support to a close one who encounters daily hassles. More specifically, it argues and demonstrates that the association between enacted (un)supportive behaviour and depressive symptoms is a function of the providers' level of UC. UC is characterized by overinvolvement in others' problems, self-neglect, and externalised self-evaluation. These characteristics appear to predispose individuals high in UC to experience depressive symptoms. As anticipated, the results show that enacted supportive behaviour was negatively associated with depressive symptoms (Study 3.1 & 3.2) and enacted unsupportive behaviour was positively associated with depressive symptoms (Study 3.2), but only among individuals low in UC. These findings are consistent with the idea that for high UC individuals, enacting supportive behaviour or not enacting unsupportive behaviour, is insufficient to reduce their high levels of depressive symptoms. Or put in another way, support providers high in UC have difficulties to benefit from helping others.

Chapter 4 continues to explore the findings of Chapter 3 by taking a different perspective. This chapter examines the impact of support recipients' feedback in combination with support providers' level of UC on depressive mood. In a scenario experiment, participants were instructed to imagine themselves helping their friend with a household task. The friend's feedback in response to helping behaviour was manipulated, i.e., either negative, positive, or no feedback. The effect of feedback on participants' depressive mood was studied as a function of UC. As expected, negative feedback has a stronger impact on depressive mood in high UC individuals than in low UC individuals. Furthermore, this moderation effect could be explained by differences in externalised self-evaluation between high and low UC individuals. Specifically, these findings suggest that high UC individuals are more sensitive to negative feedback than are low UC individuals owing to their externalised self-evaluation.

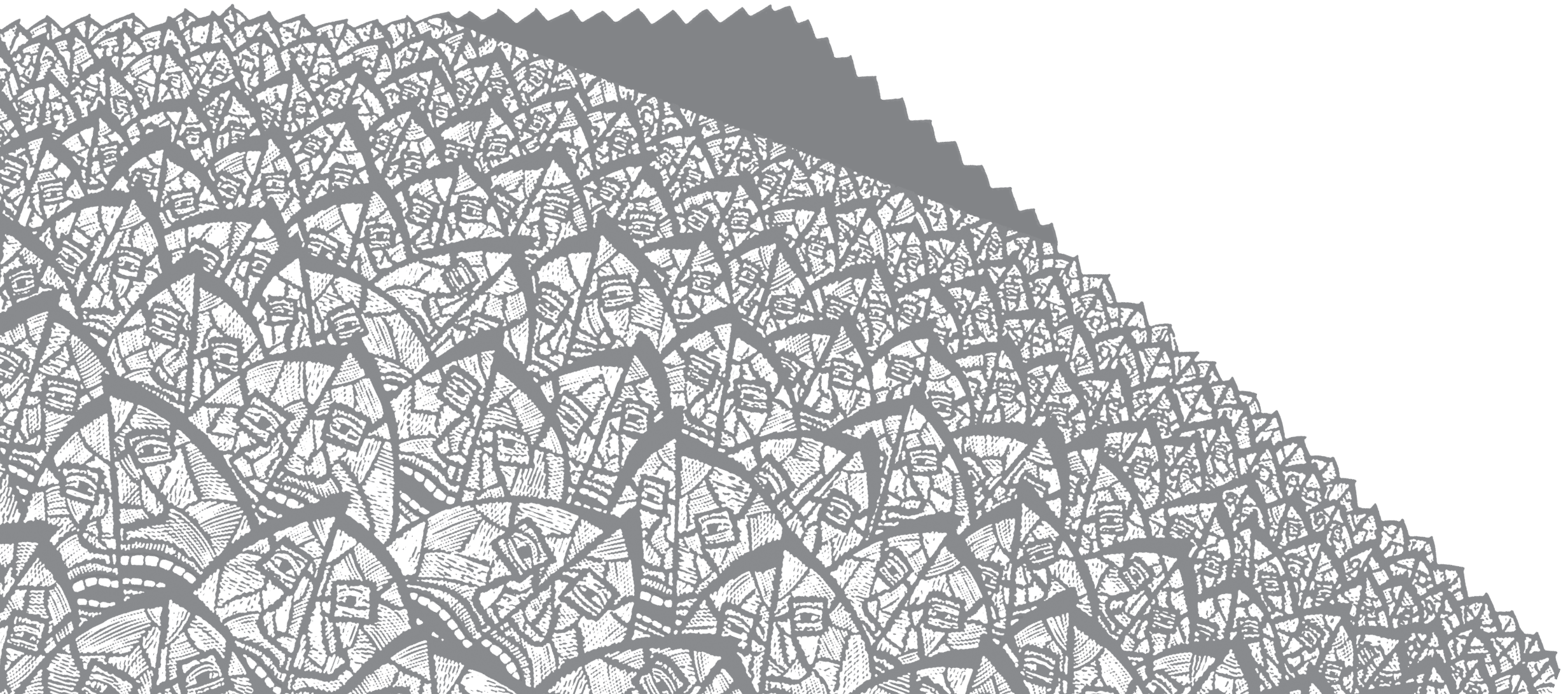
The goal of Chapter 5 is to revisit the role of UC in psychological wellbeing and to discover the underlying cognitive processes, but in a context in which one's identity as a helper will be activated and become salient. Specifically, the role of UC in psychological wellbeing was studied in spouses taking care of renal dialysis

patients (Study 5.1) and renal transplant patients (Study 5.2). It is reasoned that in the context of chronic disease, support needs to be provided over an extensive period. In such a situation, high UC individuals are continuously challenged by the activation of their caring role and struggle to fulfil it. However, because their extreme outwards orientation in relationship with others, high UC individuals provide support to significant others at the cost of their own health. It was found that across two studies with different spousal samples, UC was consistently positively related to spouses' psychological distress. In addition, UC's relation to psychological distress was mediated by three cognitive factors (i.e., a high level of externalised self-evaluation, experiencing partner's illness as one's own, and a low level of self-efficacy concerning support provision).

Finally, Chapter 6 discusses the main findings of the thesis and presents recommendations for future research. Overall, four conclusions are drawn which demonstrate the importance of UC in understanding individual differences in support providers' psychological distress. Specifically, support providers high in UC have difficulties to benefit from doing a good deed to others (conclusion 1), and more so that they stand a greater chance of becoming emotionally distressed in situations involving helping others (conclusion 2). Three distinct features of UC play crucial functions in such phenomenon. The excessive reliance on others' opinions for self-evaluation directs high UC support providers to help others in order to gain positive evaluations and to secure their self-identity as the helper. Consequently, high UC support providers respond poorer to negative feedback than do low UC support providers because unfavourable feedback of others poses threats to be a good helper (conclusion 1). Moreover, the low self-efficacy concerning support provision and the tendency to experience others' problem as one's own were found to be responsible for the high prevalence of psychological distress among high UC support providers (conclusion 3). Apart from these three conclusions, it was also concluded that although UC is conceptualized as a gender related construct, the correlations presented in this thesis show otherwise. The gender descent of UC was advised to be treated with caution (conclusion 4). In sum, these conclusions highlight the importance of recognizing the

implication of UC for individuals' psychological wellbeing, especially in situations revolving around providing support to others.

SAMENVATTING



Het bieden van steun en zorg aan een naaste in tijden van nood komt niet alleen ten goede aan de steunontvanger, maar kan ook de steunverlener positief beïnvloeden. Echter, onder vergelijkbare omstandigheden kan het psychisch welbevinden van steunverleners sterk variëren. Het doel van dit proefschrift is dan ook om meer inzicht te verkrijgen in verschillen in het psychisch welbevinden van steunverleners. Dit proefschrift richt zich daarbij met name op het persoonlijkheidskenmerk, in de Angelsaksische literatuur aangeduid als '*unmitigated communion*' (UC) en het belang daarvan voor het psychisch welbevinden van de steunverlener.

In Hoofdstuk 1 wordt een overzicht gegeven van bestaand onderzoek naar psychosociale factoren die het psychisch welbevinden van steunverleners bevorderen of verminderen. Drie categorieën psychosociale factoren blijken belangrijk voor het psychisch welbevinden van steunverleners, te weten: de aard van de zorg, de sociale omgeving, en de kenmerken van de zorgverlener. Dit proefschrift concentreert zich op de laatstgenoemde factor en benadrukt dat onderzoek naar het persoonlijkheidskenmerk aangeduid als '*unmitigated communion*' (UC) een belangrijke en waardevolle uitbreiding kan zijn van de bestaande literatuur. UC kan worden gedefinieerd als 'een gerichtheid op de ander ten koste van het zelf'. Dit betekent dat zorgen voor anderen een kernaspect is van de identiteit van mensen met een sterke geneigdheid tot UC. Echter, het vervullen van een dergelijke zorgrol gaat ten koste van de eigen gezondheid van mensen die hoog scoren op UC. Dit betekent dat het voornaamste kenmerk van UC - de 'focus op de ander ten koste van het zelf' - gepaard gaat met een reeks van problematische inter- en intrapersonlijke cognities en gedrag, zoals excessieve bezorgdheid over de meningen van anderen, het stellen van de belangen van de ander boven het eigen belang, overdreven zorgzaamheid, en het bieden van steun ten koste van zichzelf. Deze factoren kunnen belangrijk zijn voor de relatie tussen het bieden van steun en het psychisch welbevinden van de steunverlener. Hoofdstuk 1 eindigt met een overzicht van het proefschrift. In de verschillende hoofdstukken ligt het accent op de destructieve gedachten horend bij UC en op de implicaties van UC voor het psychisch welbevinden van de steunverlener.

Om een aantal redenen levert dit proefschrift een belangrijke bijdrage aan de bestaande literatuur. Ten eerste is er nog maar weinig bekend over dit specifieke aspect van het persoonlijkheidskenmerk UC (de zorgende rol als identiteit). Daarnaast is nog niet eerder onderzoek gedaan naar de relatie tussen UC en het welbevinden van steunverleners in twee verschillende situaties: in de context van het bieden van steun aan een naaste die dagelijkse problemen ondervindt, en in de context van het bieden van steun aan een partner met een chronische ziekte.

In Hoofdstuk 2 wordt nader ingegaan op UC en op de relevantie daarvan voor het welbevinden van de steunverlener. Drie essentiële aspecten van UC, te weten: de *extreme gerichtheid op de ander*, het *gebrek aan gerichtheid op zichzelf*, en de *zorgende rol als identiteit*, kunnen potentieel schadelijk zijn voor de steunverlener. De extreme gerichtheid op de ander uit zich in overbetrokkenheid bij anderen en een geëxternaliseerde zelf-evaluatie. Overbetrokkenheid bij anderen bestaat uit het piekeren over andermans problemen en het zich zodanig daarmee vereenzelvigen dat andermans leed eigen leed wordt. Geëxternaliseerde zelf-evaluatie bestaat uit de neiging om eigenwaarde te baseren op de externe omgeving. Met andere woorden, de meningen van anderen hebben een grote invloed op de manier waarop mensen die hoog scoren op UC zichzelf beoordelen, zo zeer zelfs, dat gepoogd wordt de ander te behagen om zeker te zijn van zijn of haar goedkeuring. Het feit dat de eigenwaarde zo afhankelijk is van anderen maakt mensen die hoog scoren op UC kwetsbaar, zeker gezien het feit dat mensen die hoog scoren op UC ook sterk geneigd zijn ervan uit te gaan dat anderen hen negatief waarderen.

Het gebrek aan gerichtheid op zichzelf duidt op een lage eigenwaarde van mensen die hoog scoren op UC. Deze mensen hebben niet alleen over het algemeen een pessimistisch idee over zichzelf, maar ook in specifieke situaties. Door hun de extreme geneigdheid om externe meningen te gebruiken voor zelfevaluatie, ontwikkelen zij zelfs wanneer zij steun bieden aan anderen geen positief zelfbeeld en profiteren zij dus niet van de steun die zij bieden.

Ten slotte, mensen die hoog scoren op UC zien zichzelf als een verzorger, iemand die anderen nodig hebben. Echter, de motivatie voor het bieden van steun wordt eerder ingegeven door de behoefte aan goedkeuring van anderen en de wens om de goede relatie te behouden, dan echte empathie voor anderen. Daarbij komt dat mensen die hoog scoren op UC de lat bij het bieden van steun aan anderen zo hoog leggen, dat, hoe zeer ze ook hun best doen, ze altijd zullen falen. Samenvattend, ook de zelfidentiteit van een verzorger, draagt bij aan de kwetsbaarheid van mensen die hoog scoren op UC in situaties waarin zij steun bieden aan anderen.

Hoofdstuk 3 beschrijft een studie naar de rol van UC in de context van *het bieden van steun aan een naaste die dagelijkse problemen ondervindt*. In het hoofdstuk wordt beargumenteerd en aangetoond dat de relatie tussen het bieden van steun en depressieve symptomen wordt bepaald door de mate van UC in de steunverlener. UC wordt gekenmerkt door overbetrokkenheid bij andermans problemen, zelfverwaarlozing en een geëxternaliseerde zelfevaluatie. Deze kenmerken blijken mensen die hoog scoren op UC kwetsbaar te maken voor depressieve symptomen. Zoals verwacht, bleek steunend gedrag negatief gerelateerd aan depressieve symptomen (Studies 3.1 & 3.2) en niet-steunend gedrag bleek positief gerelateerd aan depressieve symptomen, echter alleen in mensen die laag scoorden op UC. Deze bevindingen zijn consistent met het idee dat voor mensen die hoog scoren op UC, het verlenen van steun of het achterwege laten van *niet-steunend* gedrag, onvoldoende is om hun hoge niveau van depressieve symptomen te verminderen. Anders gezegd: steunverleners die hoog scoren op UC profiteren minder van het bieden van steun aan anderen.

In Hoofdstuk 4 wordt voortgebouwd op de onderzoeksresultaten van Hoofdstuk 3. Er wordt nagegaan in hoeverre de feedback van de steunontvanger in combinatie met de mate waarin de steunverlener wordt gekenmerkt door UC van invloed is op depressieve gevoelens van de steunverlener. In een scenario-experiment werd deelnemers gevraagd zich voor te stellen hun vriend te helpen

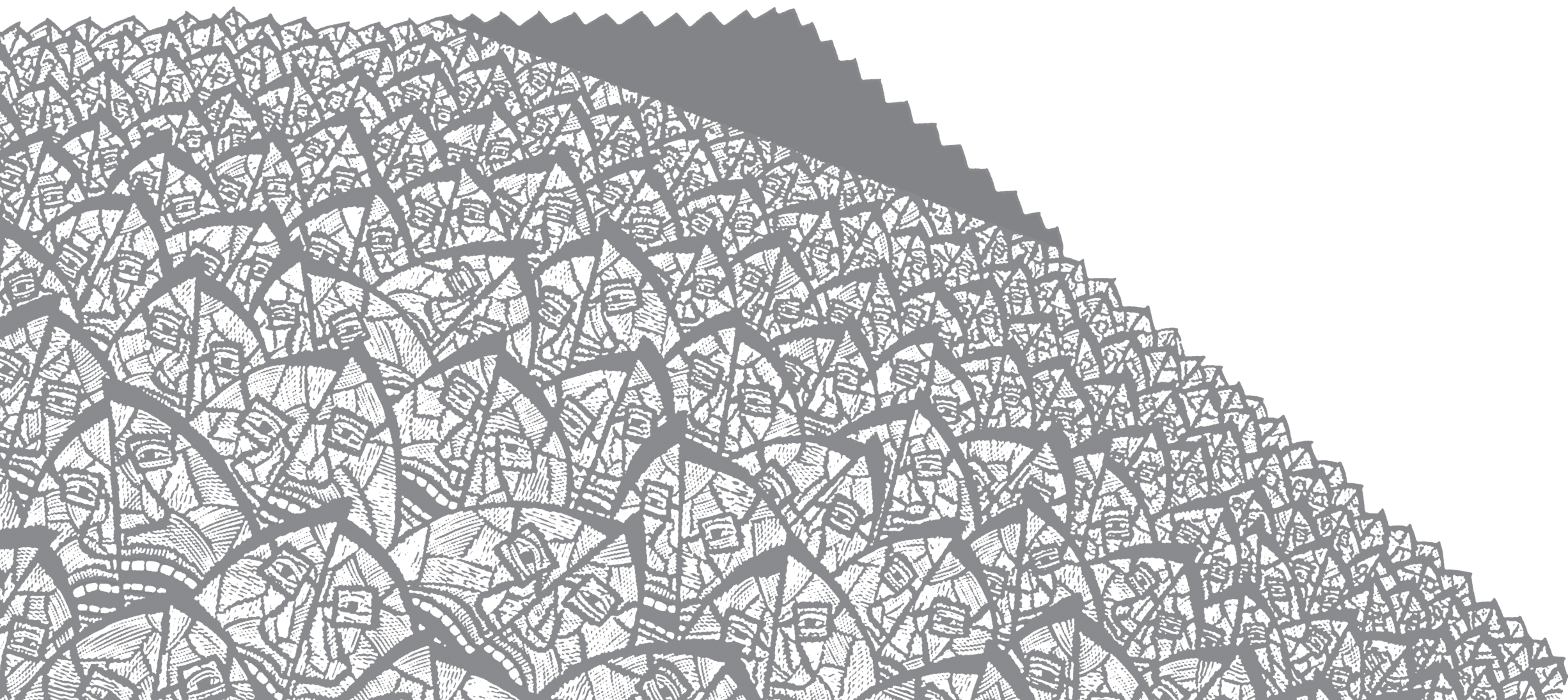
met een huishoudelijke taak. De feedback van de vriend op de hulp werd gemanipuleerd; de steunverlener kreeg geen feedback, dan wel positieve of negatieve feedback. Het effect van de feedback op de depressieve gevoelens werd onderzocht als functie van de mate van UC. Zoals verwacht bleek negatieve feedback een sterkere invloed te hebben op de depressieve gevoelens van individuen die hoog scoren op UC dan op de depressieve gevoelens van individuen die laag scoren op UC. Dit effect kan worden verklaard door verschillen in de neiging om eigenwaarde te baseren op de externe omgeving tussen individuen die hoog versus laag scoren op UC. De bevindingen suggereren in het bijzonder dat individuen die hoog scoren op UC ten gevolge van hun geëxternaliseerde zelf-evaluatie gevoeliger zijn voor negatieve feedback dan individuen die laag scoren op UC.

Het doel van Hoofdstuk 5 is de rol van UC in het psychisch welbevinden nogmaals te beschouwen en daarbij de onderliggende cognitieve processen na te gaan. Meer specifiek wordt de rol van UC in het psychisch welbevinden van partners van nierdialysepatiënten (Studie 5.1) en van niertransplantatiepatiënten (Studie 5.2) bestudeerd. De context van het zorgen voor een chronisch zieke partner activeert de identiteit van verzorger. In dergelijke situaties worden individuen die worden gekenmerkt door UC continu uitgedaagd hun rol van verzorger te vervullen. Echter, vanwege hun extreme externe gerichtheid op anderen, gaat voor individuen die worden gekenmerkt door UC, de ondersteuning van belangrijke naasten ten koste van hun eigen gezondheid. In een tweetal studies bleek een hogere score op UC samen te gaan met meer depressieve gevoelens. Dit positieve verband tussen UC en depressieve gevoelens werd gemedieerd door drie cognitieve factoren, te weten: een hoog niveau van geëxternaliseerde zelf-evaluatie, het ervaren van de ziekte van de partner als de eigen ziekte, en een laag niveau van vertrouwen in de eigen vaardigheden in het geven van steun.

Tot slot worden in Hoofdstuk 6 de belangrijkste bevindingen van dit proefschrift besproken en aanbevelingen voor toekomstig onderzoek geformuleerd. Er worden vier conclusies getrokken die het belang van UC in de individuele ver-

schillen in het psychisch welbevinden van steunverleners onderstrepen. In het bijzonder, steunverleners die worden gekenmerkt door UC hebben moeite voordeel te ondervinden van hun goede daden ten opzichte van anderen (conclusie 1), en sterker, zij lopen een grotere kans depressieve gevoelens te ervaren in situaties waarin ze anderen helpen dan steunverleners die niet worden gekenmerkt door UC (conclusie 2). Drie aspecten van UC spelen hierbij een cruciale rol. Steunverleners die worden gekenmerkt door UC baseren hun zelfwaardering op de mening van anderen, hetgeen hen ertoe aanzet anderen te helpen om zo een positieve beoordeling te krijgen en hun identiteit als steunverlener te waarborgen. Dientengevolge, zijn steunverleners die hoog scoren op UC gevoeliger voor negatieve feedback dan degenen die laag scoren op UC. Ongunstige feedback is bedreigend voor het zelfbeeld van de 'goede helper'. Daarnaast bleken de depressieve gevoelens van steunverleners met een hoge score op UC te verklaren door een gebrek aan vertrouwen in eigen vaardigheden in het geven van steun en de geneigdheid problemen van anderen als eigen probleem te ervaren (conclusie 3). Ofschoon het begrip UC oorspronkelijk is bedacht als een typisch vrouwelijk kenmerk, bleken uit het huidige onderzoek geen consistente significante verbanden tussen sekse en UC (conclusie 4). Samenvattend benadrukken de conclusies het belang van het onderkennen van de mogelijke gevolgen van UC voor het individuele psychische welbevinden, met name in situaties waarin er steun wordt gegeven aan anderen.

ACKNOWLEDGEMENT



This book is a labour of love.

My amazing promoters, you have my deepest admiration and gratitude.

Mariët (Prof. dr. M. Hagedoorn), thank you for giving me the opportunity to work with you and go on this journey with you. You have been not only my mentor for research, but also an inspiration, a role model for life. I am unbelievably lucky beneficiary of your genius and kindness.

Nico (Prof. dr. N. van Yperen, Director of the Graduate School for Behavioral and Social Sciences), it has been such a privilege to work with you. You have provided invaluable direction, support and encouragement through the PhD process.

Robbert (Prof. dr. R. Sanderman, Scientific director of the research institute for health research, SHARE), it would be unimaginable to make this far without your support, and generous encouragement. Your valuable inputs have helped and perfected this research.

So many people have supported me in the completion of this book. I want to sincerely thank:

My paranimfen, Inge and Meirav, who are as good a paranimf as one would find anywhere in the world.

Mellisa, who has been my lifeline in the Netherlands and whom I will always be indebted to for the great friendship. You are a sister and a friend alike. Inge, whom I lived more closely with than with many other people outside my own family since I first set foot on Dutch Soil, has helped me so much and always been the motivating and comforting force.

My extraordinary PhD fellows, for insightful comments, passionate debates, and invaluable support: Dr. Marike Schooker, Dr. Niels Voogd, Meirav Dagan, ZHANG

Ying, Franziska Hein, Katerina Papageorgiou, Torben Schulz, Dr. Giorgio Barbare-schi, Dr. Daniela Dobre and Dr. Merlijne Jaspers.

The following friends, for your irreplaceable companionship through the daunting business of PhD: dr. WANG Hao, prof. dr. Pieter-Jan Coenraads, DONG Ying, prof. dr. REN Yijin, dr. QU Ning, dr. WANG Hongwei, dr. QIN Li, dr. ZHANG Hao, HOU Dun, HUANG Shuo, and my two friends in China, CAO Lifeng and ZHANG Ning.

All my wonderful colleagues of the department of health psychology, for your kindness and helpfulness: Dr. Jelte Bouma, Dr. Joke Fleer, Evelien Snippe, Gemma Maters, Dr. Nardi Steverink, Dr. Sijrike van de Mei, Ans Smink, Corinne van Scheppingen; especially Methodological adviser Dr. Eric van Sonderen, Truus van Ittersm, methodologist Roy Stewart (Public Health program) and Prof. dr. Adelita V. Ranchor (leader of the Health Psychology program). Special thanks to SHARE secretary, Renate Kroese and Health Psychology Research program secretary, Tinneke van der Wees.

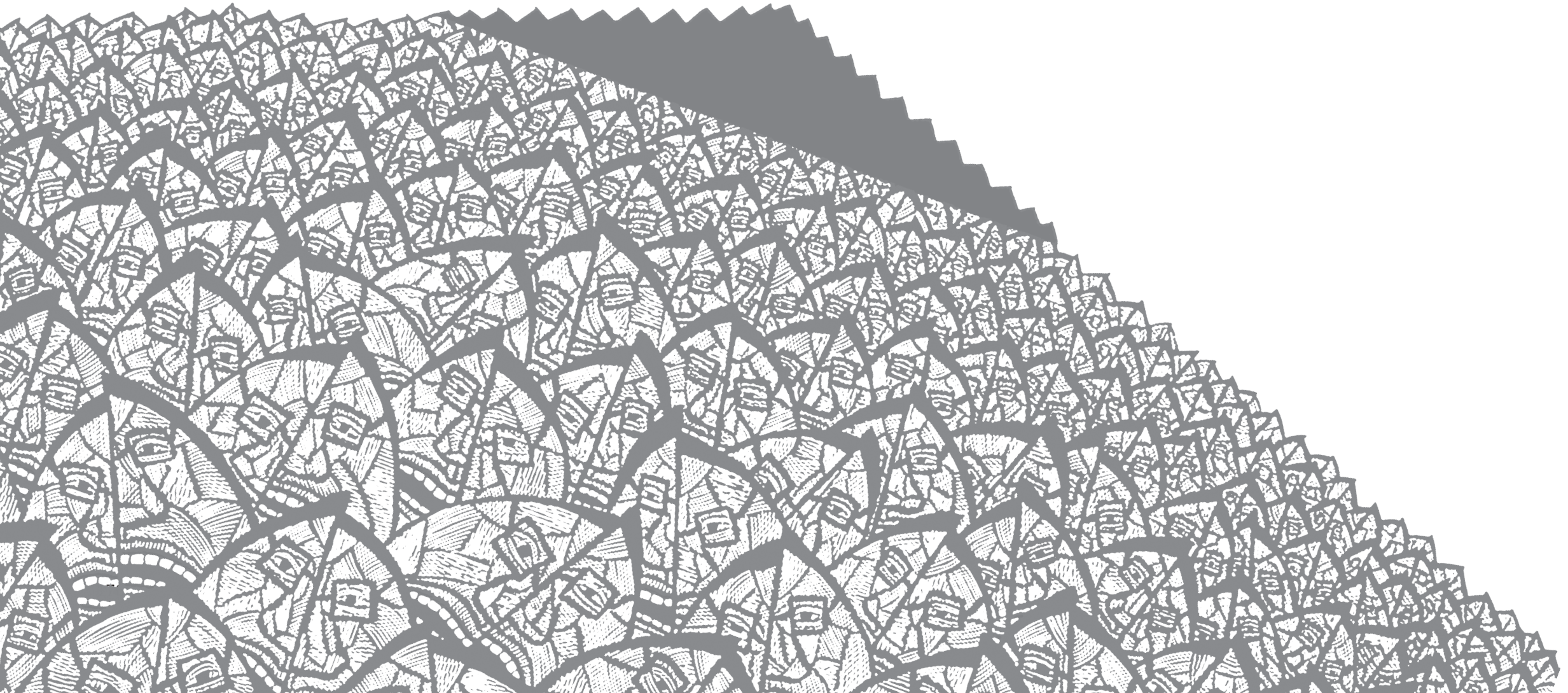
I am also grateful to Prof. dr. James Coyne (Director of Behavioral Oncology Research of the Abramson Cancer Center, University of Pennsylvania) for his generous encouragement and inspiring ideas.

My Chinese and Dutch families, neither this book nor any other milestones I have made would have been possible without the constant and generous support of yours.

Belle, my greatest source of courage and happiness. With every day that passes by... I love you more and more. Thanks for coming along this journey with mummy.

Joost, my 'support provider', I have been incredibly fortunate to have your expertise and tremendous support along the way.

LIST OF SHARE DISSERTATIONS



Research Institute for Health Research SHARE

This thesis is published within the Research Institute SHARE of the Graduate School of Medical Sciences (embedded in the University Medical Centre Groningen / University of Groningen). More recent theses can be found in the list below. Further information regarding the institute and its research can be obtained from our internet site: www.rug.nl/share.

((co-)supervisors are between brackets)

2012

Jaspers M. Prediction of psychosocial problems in adolescents; do early childhood findings of the preventive child healthcare help?
(prof SA Reijneveld, dr AF de Winter)

Vegter S. The value of personalized approaches to improve pharmacotherapy in renal disease
(prof MJ Postma, prof GJ Navis)

Curtze C. Neuromechanics of movement in lower limb amputees
(prof K Postema, prof E Otten, dr AL Hof)

Alma MA. Participation of the visually impaired elderly: determinants and Intervention
(prof ThPBM Suurmeijer, prof JW Groothoff, dr SF van der Mei)

Muijzer A. The assessment of efforts to return to work
(prof JW Groothoff, prof JHB Geertzen, dr S Brouwer)

Ravera S. Psychotropic medications and traffic safety. Contributions to risk assessment and risk communication
(prof JJ de Gier, prof LTW de Jong-van den Berg)

De Lucia Rolfe E. The epidemiology of abdominal adiposity: validation and application of ultrasonography to estimate visceral and subcutaneous abdominal fat and to identify their early life determinants
(prof RP Stolk, prof KK Ong)

Tu HAT. Health economics of new and under-used vaccines in developing countries: state-of-the-art analyses for hepatitis and rotavirus in Vietnam
(prof MJ Postma, prof HJ Woerdenbag)

Opsteegh L. Return to work after hand injury
(prof CK van der Sluis, prof K Postema, prof JW Groothoff, dr AT Lettinga, dr HA Reinders-Messelink)

Lu W. Effectiveness of long-term follow-up of breast cancer
(prof GH de Bock, prof T Wiggers)

2011

Boersma-Jentink J. Risk assessment of antiepileptic drugs in pregnancy
(prof LTW de Jong-van den Berg, prof H Dolk)

Zijlstra W. Metal-on-metal total hip arthroplasty; clinical results, metal ions and bone implications
(prof SK Bulstra, dr JJAM van Raay, dr I van den Akker-Scheek)

Zuidersma M. Exploring cardiotoxic effects of post-myocardial depression
(prof P de Jonge, prof J Ormel)

Fokkens AS. Structured diabetes care in general practice
(prof SA Reijneveld, dr PA Wiegersma)

Lohuizen MT van. Student learning behaviours and clerkship outcomes
(prof JBM Kuks, prof J Cohen-Schotanus, prof JCC Borleffs)

Jansen H. Determinants of HbA1c in non-diabetic children and adults

(prof RP Stolk)

Reininga IHF. Computer-navigated minimally invasive total hip arthroplasty; effectiveness, clinical outcome and gait performance

(prof SK Bulstra, prof JW Groothoff, dr M Stevens, dr W Zijlstra)

Vehof J. Personalized pharmacotherapy of psychosis; clinical and pharmacogenetic approaches

(prof H Snieder, prof RP Stolk, dr H Burger, dr R Bruggeman)

Dorrestijn O. Shoulder complaints; incidence, prevalence, interventions and outcome

(prof RL Diercks, prof K van der Meer, dr M Stevens, dr JC Winters)

Lonkhuijzen LRCM van. Delay in safe motherhood

(prof PP van den Berg, prof J van Roosmalen, prof AJJA Scherpbier, dr GG Zee-man)

Bartels A. Auditory hallucinations in childhood

(prof D Wiersma, prof J van Os, dr JA Jenner)

Qin L. Physical activity and obesity-related metabolic impairments: estimating interaction from an additive model

(prof RP Stolk, dr ir E Corpeleijn)

Tomčíková Z. Parental divorce and adolescent excessive drinking: role of parent – adolescent relationship and other social and psychosocial factors

(prof SA Reijneveld, dr JP van Dijk, dr A Madarasova-Geckova)

Mookhoek EJ. Patterns of somatic disease in residential psychiatric patients; surveys of dyspepsia, diabetes and skin disease

(prof AJM Loonen, prof JRBJ Brouwers, prof JEJM Hovens)

Netten JJ van. Use of custom-made orthopaedic shoes

(prof K Postema, prof JHB Geertzen, dr MJA Jannink)

Koopmans CM. Management of gestational hypertension and mild pre-eclampsia at term

(prof PP van den Berg, prof JG Aarnoudse, prof BWJ Mol, dr MG van Pampus, dr H Groen)

For 2010 and earlier SHARE-theses see our website.

Research Institute

SHARE

ISBN 978-90-367-5487-3



9 789036 754873 >

