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**HARDINESS, APPRAISAL AND COPING; A
QUALITATIVE STUDY OF HIGH AND LOW
HARDY MANAGERS**

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Hardiness, appraisal and coping; a qualitative study of high and low Hardy managers

Abstract

Hardiness is a personality construct consisting of three interrelated components of challenge, control and commitment. Hardiness is often referred to in the literature as a stress-resilience factor. Resilience is thought to result from superior coping and a more positive appraisal of potential stressors. Yet, despite the importance of the coping pathway within the stress model, virtually no empirical studies have directly examined how Hardy managers and professionals cope with stress. This paper addresses this gap.

Low and high Hardys were identified using Kobasa's Personal Views Survey. In-depth interviews were conducted with two samples of managers with high or low Hardiness scores. The analysis supports the proposition that high levels of Hardiness are associated with different coping strategies and appraisals of stress from low levels of Hardiness. The findings challenge some current concepts of what constitute effective coping strategies. The experience of the workplace in terms of perceived stress is different for low and high Hardys and this both supports existing literature on stress appraisal and provides a perspective on perceptions of stress in the workplace that could enhance our understanding of resilience and form the basis of further research on developing Hardy characteristics and intervention strategies for stress management.

Key words

stress, personality, Hardiness, coping, managers

Introduction

This paper explores how individuals reporting different levels of Hardiness cope with stress, develops understanding of how Hardiness is manifested and challenges some of the current concepts of effective coping. Hardiness is a personality construct consisting of the three interrelated components of challenge, control and commitment, suggested as a stress resilience factor (Kobasa, 1979). Stress imposes high costs on individual well-being and organisational productivity (Cooper, Liukkonen and Cartwright, 1996) and extending the theory of Hardiness and coping may provide an underpinning for developments in stress reduction practices.

Hardiness is relevant in situations of change and where personal growth and learning are required. Hardy individuals may be more adapted to current organisation demands than low Hardy. A factor hypothesised to confer stress-resilience is transformational coping in Hardy people (Kobasa, 1982a, 1982b). Yet, despite the importance of the coping pathway within the stress model, few empirical studies have directly examined how Hardy individuals cope with workplace stress.

This paper addresses this gap. It seeks to provide a richer picture of how Hardiness confers resilience through transformational coping in individual cases. Research into coping strategies and how they work is considered to be a key area in stress research and may add to understanding of stress reduction practices. Low and high Hardy managers and professionals were identified using Kobasa's Personal Views Survey. In depth interviews were conducted exploring individuals' experience of stress, perceptions of stressors and coping strategies in the workplace.

This study is important because it is based on actual workplace experience of managers - the original population of interest in the development of Hardiness theory and one under-represented in subsequent studies. The data provide a rich understanding of difference between low and high Hardy managers and could be a platform for further research and stress interventions. The paper first situates the study in the relevant literature and the challenges of studying coping strategies, followed by the method and results of the study, and then leads to a discussion of the findings and the relevance of these for workplace stress management.

Literature review

Hardy characteristics are important in occupational settings due to the origins of the construct in Kierkegaard's existential philosophy (see Heidegger, 1962, Sartre, 1956, Binswanger, 1958, Boss, 1963). To the existentialist, existence can be characterised by continual and unrelenting change so one is always in the process of 'becoming', striving for authenticity or self-actualisation, with freedom of choice to create one's life. A person striving for authenticity is unlikely to feel threatened by change but will consider it normal and vital for development. From this philosophical tradition Kobasa identified a personality construct (Hardiness) that assists health maintenance (e.g. Kobasa, 1979, Kobasa, 1982, Kobasa and Puccetti, 1983, Gentry and Kobasa, 1985, Kobasa et al, 1993). The Hardy personality comprises three aspects, *commitment, control and challenge*. These separate, but interdependent, components of commitment (versus alienation), challenge (versus threat) and control (internal versus external locus) are representative characteristics of a person who embodies an existentialist mode of being and who strives for authenticity.

Studies of coping strategies have demonstrated a complex relationship with Hardiness. Maddi (1980) suggests two coping styles, using as an example the situation of losing one's job. Transformational coping is "an attempt to transform a stressful situation into an opportunity for personal growth and societal benefit". Regressive coping refers to "an attempt to deny, avoid, or escape a stressful situation", (Gentry and Kobasa, 1985, p105). Transformational coping might involve the optimistic appraisal that you accepted risk when you joined the organisation. It might be followed by decisive actions; interviewing those who fired you, or reassessing whether that job or some new career best suits you. In contrast, regressive coping might involve pessimistic appraisal; the job you lost is irreplaceable and you are unworthy, and use strategies such as drinking heavily. Kobasa et al (1984) proposed that high Hardys would use transformational coping and in contrast, low Hardys would be prone to using regressive coping, but studies do not provide specific examples of these.

Hardiness and coping has been studied via differences in health practices such as exercise behaviour (Kobasa, Maddi and Puccetti, 1982, Maddi and Kobasa, 1984) suggesting that Hardiness might be associated with positive health practices. Manning and Fusilier (1999) found health care costs for individuals high on exercise, Hardiness

and social support were the lowest in their sample. However, those exhibiting Hardiness but not exercise or social support had the highest health care costs whilst those indicating Hardiness and exercise but not social support represented the most claims. They state that the results, based on quantitative methods, were hard to interpret.

Several studies have supported the hypothesis that Hardiness influences the way in which the individual appraises events and situations (e.g. Rhodewalt and Agustdottir, 1984, Banks and Gannon, 1988, Rhodewalt and Zone, 1989, Pagana, 1990, Wiebe, 1991). High Hardys reported greater desirable events and perceived more control over these events than low Hardys. Schafer and McKenna (1991) found that Hardiness was associated with the perception of high physical energy in a study of 219 managers. Maddi et al (2002) show that Hardiness and its three components are associated with vigorous mental health. However, the stress buffering effect has not always been supported (Benishek and Lopez, 1997). The males in their study used problem-focused strategies but the women used emotion-focused strategies and Hardiness was a stress buffer only for men in the study. Like the Leiter (1990) study on burnout, problem-focused strategies for coping are linked to stress reduction.

Some studies focus on regressive coping (Kobasa, 1982, Bartone, 1989). Nowack (1989) explored the relationship between Hardiness and four types of coping. The Hardiness measure was significantly positively associated with the coping styles of positive intrusive thoughts and problem-focused coping and negatively associated with intrusive negative thoughts. There was no significant association between Hardiness and avoidance coping. However, the instruments used limit the findings; for example, the author developed a new 'cognitive Hardiness scale' to measure Hardiness, which has not been validated against existing Hardiness measures.

Williams, Wiebe and Smith (1992) assessed Hardiness with the standard Personal Views Survey (PVS) and coping with the revised Ways of Coping Checklist (Vitaliano et al, 1985). Respondents were asked to identify a recent stressor and indicate the coping strategies that they had used. Hardiness was significantly correlated as predicted with all coping categories except for blaming self. The Hardiness composite, and the commitment and control components were significantly negatively associated with avoidance coping, whilst commitment was also positively associated with problem-focused coping and social support. Although respondents were asked about particular stressful events, no account was taken of this data in the analysis, hence the findings could relate to very divergent types of events.

Carver, Scheier and Weintraub (1989) assessed the effect of Hardiness on coping strategies, using undergraduates. Respondents were asked what they usually do to cope in stressful encounters. Results indicated that Hardiness was significantly associated with active coping, planning, positive reinterpretation and growth, denial, and behavioural disengagement. Pierce and Molloy (1990) found that burnout was associated with the use of regressive coping among teachers. Many studies only incorporate a measure for regressive coping, but as noted by Funk (1992) the absence of regressive coping may not imply that transformational coping has been used. Williams et al (1992) and Carver et al (1989) employed sufficiently rigorous methods to allow for reasonable conclusions to be made, but they both used a sample of undergraduates making it difficult to extrapolate these findings to other populations. Moreover, in neither study were coping strategies assessed with respect to specific events and both applied deductively-derived coping scales that may lack ecological validity.

Studying coping strategies

A number of calls have been made for qualitative methods within the field of stress research. Dewe (1992) suggests that the reliance on quantitative methods is 'ritualistic', and that these have assumed their own identity beyond relevant issues such as questioning what the research is really trying to address. Bhagat and Beehr (1985, p. 410) argue that occupational stress research offers a particularly "fertile ground" for adopting alternative methodologies and suggest "creativity and imagination" in research design which may yield "vivid and enriched descriptions of [the stress] processes". There has been a call for research into stress and coping to adopt qualitative methods if a better understanding of the coping process is to be achieved. Oakland and Ostell (1996) argue that what is required are open questions about the sources of stress and probing questions to identify behaviour and actions, in a manner parallel to a therapist building a model of a client's situation. The incidents should be real so that they are relevant to the context in which they occurred. Ereira-Weatherly (1996), asks for open-ended questions to explore the nature of stressful encounters and coping.

O'Driscoll and Cooper (1994, 1996) say that although research suggests that coping is a fundamental element in the relationship between stressor and strain, there is still little known about how individuals cope. Cooper, Dewe and O'Driscoll (2001, p102) argue that further investigation of coping strategies is needed and in particular into whether control oriented coping is more or less effective. The study of coping is in itself problematic because coping assumes the role of an inferred explanatory tool in most studies rather than being the focus of explicit research attention.

Most studies on Hardiness and coping have used questionnaire/ indirect report methods, and/or have used measures of regressive coping, and/or studied populations for whom the Kobasa's Personal Views Survey (PVS) was not designed. Few studies have examined directly how Hardy people cope with stressful encounters. This study uses a qualitative methodology to build the rich picture of coping strategies identified above. It was based on a study of practicing managers, the population for whom the PVS was originally designed, rather than a student population.

For the reasons outlined above, a primarily qualitative approach to exploring Hardiness and coping in a managerial population was adopted here to investigate:

- Do high Hardy managers appraise stressors differently than low Hardy managers and if so, how?
- Do high Hardy managers adopt different coping strategies than low Hardy managers?
- Kobasa hypothesises high Hardys will utilise social support better than low Hardys. Do High and Low Hardys differ in this respect?

The study was undertaken in the UK division of a global pharmaceutical company. A single division organisation was chosen for this research because the research was focused on individual differences, not differences that might be attributed to different company cultures.

The pharmaceuticals industry is a particularly appropriate area for examining the issue of occupational stress. Governmental policies towards health care in both North America and Europe have led to a lowering of profit margins for the industry resulting in an increase in competitiveness and cost reduction. The industry has undergone restructuring and mergers. Pharmaceutical companies are vulnerable due to the long

lead-time from research to launch of new products and the significant investment required in research that often fails to produce viable products. The potential for stress in pharmaceutical companies makes this a suitable site for this study of Hardiness.

Method

In order to study the coping strategies of Hardy managers by contrasting High hardy and Low Hardy managers, individuals had to be first identified who would fulfil the criteria of low or high Hardy. Permission was sought – to use Kobasa’s Personal Views Survey. This instrument was designed by Kobasa and is the standard Hardiness measure, and has adequate psychometric properties (see Parkes and Rendell, 1988, Funk, 1992 and Kobasa, 1993). Questionnaires were sent to the 374 managers in the division and 250 were returned fully completed (72.45%). To obtain the maximum difference in Hardiness, interviewees were randomly drawn from the top 20 and bottom 20 of Hardiness scores.

Table 1 provides details of the Hardiness scores and demographic data for the top 20 and bottom and the total sample. This table highlights that population from which the high Hardy sample and low Hardy sample were drawn were similarly matched, except in willingness to be interviewed.

Table 1 – Hardiness scores and demographic data in sample

	<u>Top 20</u>	<u>Bottom 20</u>	<u>All</u>
Hardiness Scores:			
Mean	88.06	62.85	77.28
Maximum	93.42	66.71	93.42
Minimum	85.50	49.80	49.80
Job Level:			
Managers	55%	75%	63.2%
Dep’t Heads	20%	10%	20.4%
Directors	10%	5%	6.3%
Educational Level:			
% with PhD	35%	40%	47.2%
Age (years):			
Mean	43.0	45.8	44.2
Maximum	62.5	63.4	64.9
Minimum	31.0	33.8	25.5
Marital Status:			
% Married	85%	85%	83.6%
Gender:			
Males	85%	80%	81.6%
Females	15%	20%	18.4%
Willingness to be interviewed:			
Yes	80%	65%	83.6%
No	20%	35%	16.4%

Interviewees agreed to participate in a study on how they ‘manage pressure in their work and non-work lives’, taking care with terminology as highlighted by Stone and

Neale (1984). Consent was requested for tape recording the interview. No reference was recorded in the appointment diary as to whether an interviewee came from the high or low Hardy sample, as this knowledge could bias data collection. Interviews were conducted in privacy on site, lasting at least one hour.

The interview commenced by explaining that the researcher was interested in how the interviewee managed the pressure arising from both work and non-work situations. It was emphasised that there were no right or wrong answers and the interview was confidential. The in depth interview procedure allowed for flexibility in both phraseology and ordering of questions. Participants were asked to recall a recent situation (during the previous few weeks) at work where they felt “the pressure got to you”. They were then asked to explain their experience and indicate how they managed the situation. Thus, an attempt was made to elicit stressors, the cognitive response to them and coping strategies as close to the actual occurrence as possible. If the interviewee could not identify a work situation in the previous few weeks, he or she was asked to recall the last time they had encountered such a situation. The same procedure was undertaken with respect to a non-work situation. Participants were asked if they used social support and how important it was. The underlying meaning of the statements was sought by the use of probes such as “why is that important to you?” or “why did that help?” The tapes were subsequently transcribed.

A total of 21 interviews were conducted from this sample. There is no minimum or maximum sample size for such a qualitative study and interviews were continued until the themes emerging indicated theoretical saturation (Miles and Huberman, 1994; this was achieved with 11 high Hardys and 10 low Hardys. One participant refused to be taped. One PVS score transpired to be unusable. There was replication of themes and no new themes by the end of the interviews. Hence, it was believed that this sample size was sufficient to explore the issues (Miles and Huberman, 1994). The final analysis therefore consists of the interviews with 8 low Hardys and 11 high Hardys.

The approach taken here to analysing the data has been advocated by Agar (1986). Each statement in the interview data is individually coded and built into common themes, referred to as strips. Strips are then grouped into progressively higher orders, and the meaning of these higher order groupings is interpreted (the schema). Schemas allow for theory building as they emerge from the data. A method of determining selection of themes was to limit this to those highlighted by a minimum of 50% of the sample, although the majority of the sections identified here reflect responses of 60% to 100% of the participants. Quotes provided below are raw data and illustrate themes. It must be remembered however, that a theme emerges from many pieces of data and thus in examining a single quote, multiple interpretations may appear possible. However, it is not possible to reproduce the entire data set here.

The emphasis within this paper is on how Hardiness affects coping in occupational settings, and whether high and low Hardy individuals differ. Thus the data is presented to offer this comparison. For brevity, single quotes are offered to exemplify themes elicited from the majority.

Results

Appraisal of stressors

The most noticeable difference between the high Hardy and low Hardy interviewees was that the high Hardy sample in general reported rarely experiencing occupational stress. The majority was unable to recall a stressful work event, with the remainder referring to a situation that caused ‘a minor irritation’. They had to be probed to discover pressure situations. Most could not recall a non-work stress situation. One for example, when pressed, did describe being given six weeks to live 11 years previously as somewhat difficult----but immediately described how he actively dealt with this by leaving hospital, buying a house and getting married.

Low Hardys immediately identified a recent or near recent stressor (or many). The majority mentioned work overload as a principal stressor. They did not report coping strategies spontaneously.

GA: The biggest pressure is the sheer volume of work that I have to deal with and the deadlines associated with it....there is always more work than you can comfortably cope with and that has been the situation for well over 4 years. Unrealistic, very demanding, working long hours and literally under a lot of pressure...It is unrelenting. (*Low Hardy*)

One explanation for the perceived lack of stress in High Hardys is that they simply ‘thrive on pressure’. Although this idea is upheld by the data, it is an incomplete explanation. Hardy people actively manage, as well as thrive on, pressure. For example, work overload emerged as a major issue for the low Hardy sample, but not for the high Hardy sample. This cannot be explained in terms of different workloads in different departments, as there was an adequate match in this respect; members of the respective samples were even found to work within the same section.

TK: I enjoy what I am doing. I love it. And I make sure that I find ways of dealing with things that I don’t like in a way that gives me as little grief as possible. I won’t do anything that I can’t enjoy. Well not for very long. I’ll find another way of enjoying it and do something different. I wouldn’t do a job I couldn’t enjoy. (*High Hardy*)

High Hardys, without prompting from the researcher, proceeded to outline the strategies that they use to cope with pressure. The high Hardy sample was aware of the factors that had the potential to create a stressful encounter for them and dealt with them pro-actively, demonstrating high levels of self- efficacy.

Low Hardys create a different type of environment, actively engaging with their environment in such a way that they create more stressful situations.

CJ: I tend to set myself deadlines. I tend to get fretful if I can’t fulfil those deadlines, but if I do fulfil them well in advance, then invariably I set myself another deadline, within that previous deadlines and if I can’t fulfil that I get fretful...I don’t give myself any rewards. I just keep setting myself more and more deadlines. (*Low Hardy*)

Many managers follow the '80/20 rule' (the first 80% of work effort has most impact and is the easiest, the last 20% is the hardest with diminishing returns on impact), but it emerged from the data that low Hardys do not.

CD: I suppose I've had to make myself pull back from wanting to be I suppose a bit of a perfectionist..[but it is still difficult] when the work is intense and I'm churning out stuff which I personally feel isn't quite good enough although I know [the] people who receive it seem to think it is reasonably okay..... (*Low Hardy*)

Low Hardy participants had unrealistic expectations of perfection and were unable to tolerate mistakes, rather than making choices about what to do and when to stop to suit their own purposes like high Hardys;

LD: [having control is important] because it gives me freedom for doing the things that I want. And I think that is where most people's frustrations come from is a lack of freedom. Not having control of your own destiny. (*High Hardy*)

The low Hardys did not perceive this choice.

SG: In the previous job it wasn't the workload it was the treacle - the meetings, the working parties which never amount to much...But with this macho management style you can't say 'no, I am already working 24 hours a day' you say 'yes', and it just keeps on going. (*Low Hardy*)

Whereas work overload did not seem to be an issue for the high Hardy sample;

LD: If the volume is too big, I will say is this me or is this the sheer volume? If the volume is too big I would have a word with the boss. Usually it goes the other way, I am looking for work. I don't think I ever have in 15 years said it is too much. (*High Hardy*)

The difference between the high and low Hardys in perceiving situations as stressful relates strongly to the commitment dimension. The high Hardys ensure that their working life is meaningful and they choose and make environments that suit them; they exhibit a high degree of self-efficacy in bringing this about.

Avoiding time wasting is a specific example of this: the high Hardy sample emerged as being extremely time conscious, ensuring that their time is not wasted. All issues surrounding time were found to create pressure for them. The underlying issue was inefficiency.

LD: you need to be efficient, fast and not waste time on unnecessary work. Worse than that, empty work. (*High Hardy*)

Although managers in general could be expected to value their time, this did not emerge for the low Hardy sample; thus it is argued that this is particular to the high Hardy sample, and not an issue for all managers. The Hardy sample was not prepared to endure situations that they perceived to be a waste of time.

Coping strategies

None of the low Hardys applied the coping strategies identified for the high Hardy sample. Some difficulty was found in eliciting coping strategies from them as many would simply say “I don’t know” or “I manage the best that I can”. Some themes, consistent with those identified by Kobasa as representative of regressive coping emerged, but low Hardys reported few coping strategies.

SG: One of the things that worries me is that I waste an awful lot of time at home - the strategy is not to do anything to be honest. Um, I get home about 7pm, put the kids to bed by 8, have something to eat, watch the news, then it is time for bed...It is an inertia thing. (*Low Hardy*)

CM: [my strategy consists of] Doing absolutely nothing. Watching the TV.whatever it is, never mind if it is rubbish. (*Low Hardy*)

Each Hardiness characteristic is believed to offer different appraisal and coping mechanisms:

- ‘Commitment’ results in the person appraising events as meaningful and developing self-efficacy. The person will be in touch with, and express, their personal values. Do High and Low Hardys differ in this respect?
- ‘Control’ assists the person in appraising events as part of a longer-term life plan and confers the impetus to initiate necessary action. Do High and Low Hardys differ in this respect?
- ‘Challenge’ leads to the idea of tolerating ambiguity and implies adaptability so that the person can easily adjust to new experiences. Do High and Low Hardys differ in this respect?

High Hardys had many strategies for dealing with their workplace and lives as a whole. In fact, many aspects of the high Hardy coping strategies related to a dynamic interplay between commitment, control and challenge; the desire for life/work to be meaningful, with a longer term life plan leads to action to deal with events that do not fit into that schema and the self efficacy to take appropriate action. These strategies might not best be described as coping strategies as that implies that once stress is experienced strategies for dealing with it are used. The dynamic that the high Hardys described however was of managing life in such a way that stress was not a serious problem; having coping strategies is just as much about preventing stress as coping with stress. Specific strategies do not map one for one against commitment, challenge and control.

Strategies reported were:

Confrontive interpersonal coping: This type of coping focuses on reducing difficult interpersonal situations. Potentially stressful encounters are tackled straight away, rather than letting an event escalate. This differs from direct action that generally denotes rational task-oriented behaviours as it focuses on relationships and emotions.

MD: My belief has always been if you have something that is bothering you that is stressful, you must do something about it, you know, even if it is just registering your dissatisfaction, because until you do something you can’t get that release from it. And there have been times when I have maybe fallen out with somebody.....I must go in the next day and sort it out, you know, I cannot let it go on....If I don’t say something

I'll start thinking it over in my mind and it will get bigger than it ever should be. (*High Hardy*)

MS: [in talking of a "difficult" staff member] It is just vague irritation. I mean I didn't have sleepless nights...it doesn't impact on me that much. But I realised I was getting nowhere with him, and he did as well. So we involved HR and that tended to resolve the issue. It hasn't resolved it entirely satisfactorily but I don't think it ever will....but we have reached a modus operandi. (*High Hardy*)

- **Positive comparison:** seeing the bigger picture

ES: The way I look at it is, you may have got some massive problems at work, some challenges or you may have fallen out with your boss or something and you say 'well, compared with someone who has just been told he has got 6 months to live ...or something, this is nothing. *That* is worth worrying about. This thing [his job] is important but you have to put it in perspective and say 'so if they sack me tomorrow, so what'. You still have your health and the sun is still shining. (*High Hardy*)

TC: I like to visit old churches to do nothing other than to walk round them and to think 'this has been there for 800 years and aren't I a small mortal?' (*High Hardy*)

- **Compartmentalising:** compartmentalising is not found elsewhere in the Hardiness literature and is defined here as 'the ability to segment situations and events into separate components and ignore specific components until the person wishes to address them'.

MC: I seem to vaguely remember somewhere in the past the concept of a chest or a box and you put a problem into the box and close the lid and that does it, you go on to think about other things. Now I am not aware that I have ever consciously developed that, but I think some time in the past I did have to develop it. So I suspect that the mental gymnastics is in there somewhere and that is what I use. (*High Hardy*)

Thus, although this coping category is similar to avoidance, it has positive value by acting as a deferring mechanism, for example, in instances where there is a lack of information, or until the situation can be addressed.

High Hardys make the transition from work to non-work at the end of the day without carrying over work problems. This ability is sometimes facilitated using transitional symbols or rituals.

LD: Like turning off a switch. I have a time management system and I know when I zip that thing up then that is it, it is finished for the day. People always say 'well what happens if you lose it?' Well, I have never lost it and if I do, I don't care, I will start again. It might do me good [laughs], to get me out of a rut. (*High Hardy*)

- **Balance:** the majority of the high Hardy sample reported the importance to their well being of maintaining balance, with work and non-work in harmony. Despite their work commitment and job satisfaction, high Hardy participants often cited that they failed to become pressured at work because "there are more important things in life". These 'more important things' were non-work factors such as family, friends and health. Thus, the high Hardy person emerged as being ambitious but not to the point where they would have to sacrifice their home lives in order to advance in the organisation.

LD: [Balance is] to cover the work, home life, various other aspects of life - spiritual, money, family, social, intellectual. Now and again I will check to make sure that I have got things in sync....(*High Hardy*)

A balanced life manifested in the avoidance by high Hardys of working long hours or taking work home.

CJ: So many people I know they work to ridiculous hours in the evening, they are not always as productive as someone who works less hours... I think past that, I think that my whole life is important, so I have work time and I have home time and both are very important to me. And I just think that if I started to stay until 7,8,9, or 10 and took stuff home then one would suffer. And I am not prepared to do that...I tend to value my time quite hard and if we decide we are going to the cinema Wednesday, then we will go. (*High Hardy*)

The low Hardys often spilled work into non-work.

CL: I take work home. I take some every night and every weekend...I encourage my people to do it also...If I had an afternoon free in the office, I would find other things to do....rather than to doing what I really had to do. (*Low Hardy*)

- **Positive activities:** Kobasa proposed high Hardy individuals would engage in a variety of positive activities in their non-work lives. The hypothesis was supported with this data.

SC: I wrote down a list the other day of all the societies that I [actively] belong to and there are about 20. (*High Hardy*)

The high Hardys exhibited an extremely diverse range of non-work activities, none of which were similar to those they engaged in during normal working hours.

- **Social support:** previous empirical findings on the relationship between Hardiness and social support have been ambiguous. However, the findings here were unequivocal. The majority of the high Hardy sample report that they use social support to a great extent whenever they have a problem or an issue on their mind.

TK: If I have a problem I don't hold it inside, I go and talk it out with everybody I can think of....That may not be of any value to anybody else but it certainly solves it for me. So I don't have that little knot inside being eaten away because I am not talking to anybody about it. [Others] hold it in, they think it is macho...or think they can't cope. That doesn't worry me. What worries me is that it is inside hurting me, so I get it out. (*High Hardy*)

The majority mentioned that this strategy helped them emotionally rather in getting opinions on issues. The relationships that the Hardy sample formed at work were cited as "crucial" and "vital". Understanding people, getting along easily with others and putting substantial time and effort into establishing good relationships were frequently reported.

MS: I reckon that my interpersonal relationships....are excellent....I spend a huge amount of my time talking to them and going along and listening....I get pleasure as well as satisfaction from watching individuals in my charge develop and mature and become extremely valuable, contributing fully mature people. And I am thinking of some within the department who have really developed extraordinarily in 18 months to 2 years. So that gives me a great deal of pleasure. (*High Hardy*)

Whilst the high Hardy sample almost unanimously used social support, the low Hardy sample did not.

AB: I feel it is asking too much of people, but probably for my mental health I should do more. I think I would probably be healthier if I did, but I don't....I would probably like to talk more to my husband about it but I know how boring it is and so I don't...I wouldn't dream of talking to my friends about it and I don't think it is very professional to do it at work really. (*Low Hardy*)

The low Hardy sample does not invest in establishing healthy interpersonal relationships. Thus, the low Hardy participant probably has objectively lower levels of social support available, should they ever require them. Similarly the workload issues mitigated against positive activities and balance.

Belief in self

This theme was common to each of the high Hardy sample and refers to a deep sense of self worth, of an awareness of one's unique talents and capabilities from a realistic viewpoint. This underpins capacity for transformational coping.

CJ: I think, um, without sounding bigheaded, a lot of it comes from confidence. So I am extremely confident that I can do whatever has to be done...So it is very rare, almost never, that I come across a challenge that I don't think I can reachBecause I am confident of my own ability, confident that I can do the job ... I can do more than the job. And also because I know, well okay if I get some things wrong, well so what. I don't have a big hang-up about making a mistake. I don't tend to worry about things. And I think perhaps that is the confidence I am talking about - if you make a mistake, so what. And if the worst comes to the worst and [the company] decided they didn't want me tomorrow, I am confident enough that I can go somewhere else and get another good job. I may be deluded but it doesn't actually matter in terms of how I feel. (*High Hardy*)

In these managers, confidence had increased over the years. It was development in 'bite-sized chunks', (a phrase used by one of the participants). In other words, the high Hardy sample appeared to manage their lives by taking on additional responsibilities and work projects that they felt were within their personal capabilities (e.g., prior experience) but matched their need for challenge. This process reflects not only inner confidence, but a high degree of self-awareness of their personal strengths and weaknesses. The 'bite-sized chunks' approach to managing life was highlighted by six of the sample.

ES: If somebody said we would like you to be project director of a \$750m project I would think about it. I suppose I would be thrilled....but perhaps it is too much too soon. Now if they said we would like you to take on a \$50m project, I would jump for joy then. So it is progression, but still within my comfort zone. And I know where the zone ends and I don't like to go beyond it....the best way for me to grow and advance is in bite size chunks and don't try and bite off too much at a time. (*High Hardy*)

The degree of self worth that the Hardy participants exhibited offers the potential to reduce the degree of stress that these people feel; self worth moderates the effect of potentially stress-provoking situations such as conflict and criticism. Confidence was frequently cited as the most important reason for failing to feel pressured: they do not worry and have sufficient faith in themselves that they will overcome problems. In Hardy participants this was apparent in the way they manage their careers; they move in incremental steps, so they felt able to handle the challenges. They chose to place themselves in situations where they would avoid severely stressful conditions whilst promoting personal growth. This could have practical implications for developing 'resilience' in for example, Employee Assistance Programmes.

Low Hardys, in contrast, did not take responsibility for their growth, nor feel that they change their response to the political environment.

SG: People who are doing a good job have been marginalised by people who don't understand what is going on...I find it incredibly frustrating when I think inappropriate behaviours are praised. It is the people who are doing it [the work] who tend not to get recognised....Some people were not recognised because they were not the sort of people who would stand up and make a noise...People make a lot of noise about what they do, but whether they do it or not is largely irrelevant. (*Low Hardy*)

Whereas

CH: When I first came here 11 years ago I was very quiet and basically I am quite shy...I think it is more a case of me sort of pushing those sorts of attributes in myself rather than them being there naturally. But I think in this [job] if you are not prepared to say what you think and be prepared to speak out you just basically get overlooked. Be it right or wrong. (*High Hardy*)

The low Hardy feels helpless and blames others whereas the high Hardy takes a more realistic view of the situation and assumes personal responsibility to modify her behaviour. Figure 1 summarises these findings.

Figure 1. Summary of study findings

	High Hardys	Low Hardys
Identification of stressors	Few recollections Difficult to recall	Many recollections Easy to recall
Actual workloads	Same as Low Hardy	Same as High Hardy
Perceived workload	Reasonable	Very high
Strategies to avoid stress	Many: - readily available for recall - 80/20 rule - negotiate workload - set realistic targets for self - avoiding time wasting	Few
Strategies to increase stress	Few	Many: - deadlines (self imposed) - perfectionism - low tolerance of own mistakes
Coping Strategies	Many: - confront difficult situations - positive comparisons - compartmentalising - work/life balance - positive activities - social supports	None
Belief in self	High sense of self worth ⇒ personal growth ⇒ sense of capacity to change situations	Low sense of self worth ⇒ acceptance of “how things are here”

Discussion

This research adds complexity to existing knowledge on Hardiness and coping (Gentry and Kobasa, 1985, Kobasa, 1982a, 1982b, Maddi, 1980):

- unequivocal support for the view that high Hardys use social supports more than low Hardys

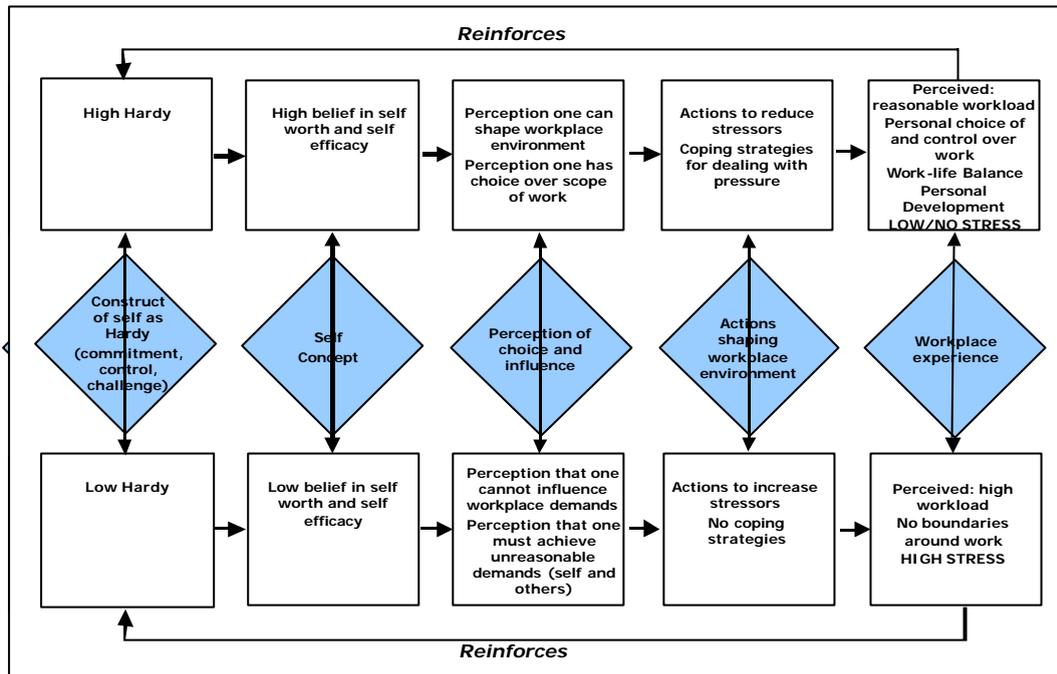
- an additional coping strategy (compartmentalising)
- the use of in depth interviews rather than using pre-determined coping scales has produced evidence that items on such scales may have different meanings for low and high Hardy. High Hardys appear to employ avoidance coping but this is because, for example, items usually included as avoidance such as ‘I tried not to think about the problem’ has a different meaning from that offered by high Hardys when this is explored in depth. Similarly, planning, which is generally considered to be an adaptive coping strategy, was seen as a counter-productive strategy by the high Hardys. Not only does this particular result provide a more detailed understanding of the efficacy of such coping strategies as planning, but it also highlights the limitations of existing coping scales.

However, a reading of the transcripts of the interviews, as represented by the quotes in this paper, gives a more complex picture. The results presented above strongly suggest that the high Hardy sample experience subjectively different levels of occupational stress than the low Hardy sample, even though all participants had objectively similar work roles and tasks. This can be explained in terms of the high Hardy sample interacting and shaping their work and non-work environment in what can be seen to be adaptive ways such that the high Hardy participant creates for him or her self an environment that is characterised by lower levels of pressure. In contrast, the low Hardy participants interact with the environment in such a manner that stress is actually increased. This was particularly apparent with the differences that emerged with respect to workload; it is clear that the low Hardy participant perceives a higher level of workload than the high Hardy participant in this study.

Hardiness does not manifest simply as individuals who are particularly adept at managing stressful encounters; rather Hardiness can be seen to be associated with individuals who appear to be managing their overall lives particularly well. The data suggest the interaction between the strategies to manage the environment and coping strategies create a synergistic dynamic such that in equally demanding environments the high Hardys do not experience as much stress and therefore have to use less coping. Indeed their coping strategies are aimed at preventing stress rather than coping with it. They use social supports for emotion-focussed coping. The importance of underlying confidence and self-belief are part of this complex Hardiness construct. High Hardy individuals were found to have a tendency to look for personal growth outcomes from work and this orientation builds confidence and reduces threat associated with change and challenge, commensurate with the origins of the Hardy construct. However, despite being ambitious, this was not to the point where they would sacrifice work-life balance. Transformational coping is likely to be related to the underlying self-beliefs, rather than use of problem or emotional focused coping. These dynamics need elaborating to extract the lessons for teaching/counselling in stress reduction. These may link back into intervention methods grounded in the existential philosophy from which the Hardiness construct is derived (Milton et al, 2002). In particular interventions may need to focus on the individual’s *beliefs* about their capacity to shape and manage their environment rather than on learning coping strategies. Coping strategies will not be employed unless individuals think they can change their circumstances and shape their environments: this paradoxically reduces the need for coping strategies.

A tentative model is shown in Figure 2. The Figure illustrates the dynamic relationship between Hardiness, coping strategies and perceived stress mediated by perceptions of choice and belief in one’s ability to shape the environment.

Figure 2. Dynamic model of Hardiness and workplace experience



Conclusions

The study is limited in a number of ways; the research is based on a small sample in one organisation and should be regarded as a basis for further exploration. However, it shows how Hardiness manifests into specific types of behaviours within and beyond the work place, in ways not readily apparent from the Hardiness literature. In particular the methodology employed highlights the need to study coping processes in such a way that the methods do not force findings into neat measurable categories, missing the richness of coping processes and their differential use by diverse personalities.

The model developed from the findings of this study further elaborates the existing work on Hardiness and coping strategies. It provides a more complex understanding of transformational coping, suggesting that Hardys do use emotion-focussed coping, that planning is not always a transformational strategy and indeed can be regressive. It suggests an additional coping strategy (compartmentalisation). However, the most useful contribution might lie in suggesting a dynamic framework for how Hardiness manifests at work and the model proposed suggests that interventions based on beliefs about one's capacity to choose and shape the workplace are likely to be fruitful as they may engender an increase in Hardiness. Further research exploring these relationships is needed, perhaps keeping in mind its philosophical origins, rather than in further de-constructions of coping strategies which can lead to tautology. Hardiness is a valuable construct for understanding how people cope with the complexities and changes associated with organisation life and should be seen in this broader context rather than simply in terms of stress and coping.

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