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The Development of a Psychological Theory

La Trobe University, Bendigo

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The Development of a Psychological Theory

Jill Francis

Worner Research Lecture 2001

Biography

Back in the heady days of free university education, Jill Francis attended the University of Melbourne, where she completed an Arts degree (with a double Psychology major) and a Music degree. After many years working in music education, culminating as Music Director at Penleigh-Essendon Grammar School, she returned to university study. On completing the Post Graduate Diploma in Adolescent and Child Psychology, she was awarded a Ph.D. scholarship at the University of Melbourne in 1993. She took up her first academic position as a lecturer in psychology at La Trobe University, Bendigo, in 1996, and graduated with the Ph.D. degree from the University of Melbourne in 1998.

Dr Francis is an expert on Self-Discrepancy Theory. She has applied this theory to the workplace context in Bendigo, by focusing on perceptions of expectations, and Quality of Work Life issues, among workers in the region. More recently, she has applied the theory to issues relating to health behaviour and to emotional health among older people. Dr Francis has presented her research findings at international conferences in England, New Zealand, Sweden, Canada, and Australia. Her work has been published in international academic journals and she has been awarded various research grants, either as sole researcher or with colleagues. In 1998, Dr Francis was awarded the prestigious La Trobe University Bendigo, Research Award.

Acknowledgments

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The development of a psychological theory

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One of the most fascinating and challenging aspects of the branch of psychology known as 'social psychology' is that it is concerned with how the social world appears to the individual, not simply with how it appears to the researcher. Thus, it is an explicitly phenomenological field of enquiry. We ask the research participant, 'How does it seem to you?' At the same time, the development of social psychological theories is based on empirical evidence, or evidence consisting of data that have been collected in a systematic and objective fashion. An aim of this paper is to show how the development of Self-discrepancy theory (Higgins, 1987) has occurred in the context of these two types of commitment - to the subjective experience of the individual, and to objective research methods.

First, let me comment on the title of this paper. Some will recognise the words as a slight misquotation from a popular song entitled, *That's my weakness now*, written by Americans Bud Green and Sam Stept, and made famous in 1928 by the singer, Helen Kane (the original 'boop-boop-a-doop' girl). I have chosen this title because it highlights three facets or aspects of the self that are proposed by Self-discrepancy theory.

1. Background of Self-discrepancy Theory

Several psychological theories, as well as common sense, tell us that people like to be consistent. Self-consistency theories have explained a great deal of human behaviour. For example, smokers tend to be less convinced than non-smokers that smoking is dangerous to health (Gibbons, Eggleston & Benthin, 1997). There is also evidence that people who have a low view of themselves prefer to spend time with others who also have a low opinion of them, or who mistreat them in some way (Swann, Wenzlaff, Krull, & Pelham, 1992).

The basic idea behind self-consistency theories in general (e.g., Festinger, 1957) is that people feel uncomfortable or distressed when they notice any inconsistency between different aspects of themselves - between the way they think and behave, or between different beliefs or attitudes. This distress motivates people to change their beliefs or actions in ways that will make them more consistent. So, the general principle here is that the inconsistency causes an emotional reaction, which 'energises' or motivates a change in thinking or behaviour, which in turn relieves the emotional discomfort. This seems fairly straightforward and logical, or even obvious.

Self-discrepancy theory, first proposed by Tory Higgins in 1987, has added a slightly more sophisticated idea that is proving to be quite useful in practice. This theory is exactly like other self-consistency theories, in that it proposes that inconsistency, or discrepancy, results in emotional discomfort, which motivates some sort of change. It differs from previous theories in that it specifies different types of inconsistency, different types of emotional discomfort, and even different types of behaviour change that result from these discrepancies.

I would be good, I should be good, but gee

The essence of self-discrepancy theory is this. Think of each person as having not just a self-concept, but a complex 'self-system' made up of interconnected facets. For most people, these facets consist of the actual self (or self-concept), and two major types of personal standards: the ideal self-guide (the kind of person you would like to be - your wishes and aspirations) and the ought self-guide (your beliefs about what you ought to be like - your duties and obligations). According to the theory, people spontaneously and continuously check on whether these different self-aspects are consistent. For example, *I would be good* (ideal self-guide); *I should be good* (ought self-guide), *but gee!* (actual self does not live up to these personal standards).

Using these facets of the self, it is possible to identify different types of inconsistencies, or discrepancies, for example, an actual-ideal discrepancy ('I'm not as smart as I would like to be'), or an actual-ought discrepancy ('I'm not as good as I should be'). Self-discrepancy theory proposes that each type of discrepancy is associated with a different type of emotional vulnerability. An actual-ideal discrepancy indicates that a person has failed to achieve an aspiration. The sense of loss associated with this belief is associated with *dejection-related* emotions such as disappointment or sadness. In contrast to this, an actual-ought discrepancy indicates that a person has failed to meet an obligation. The sense of threat associated with this belief is associated with *agitation-related* emotions such as guilt or fear. Here, for the first time, we have a theory that might help us understand the different issues underlying depression and anxiety. Note that the theory concerns itself with 'normal' levels of these feelings, not just with clinical levels. The principles are proposed to apply to people in general, not only those with particular mental health problems.

Understandably, there has been some debate over the distinction between ideals and oughts: Is it a distinction that makes sense to people, or is it simply a distinction that is imposed by researchers on their research participants? Also, given the well-known co-morbidity of anxiety and depression, is it a distinction that is useful? If a person is feeling both agitated and dejected, how is it possible to tease out separate effects of actual-ideal versus actual-ought discrepancies? A colleague and I have recently addressed these questions in some detail (Boldero & Francis, 1999; 2001). In this paper, however, I will concentrate on some interesting applications of the theory that may in themselves convince you that this ideal-ought distinction is useful and important.

The sociality of the self

Self-discrepancy theory goes on to propose that these facets of the self may be viewed from different perspectives: one's own or that of another person (such as one's spouse, boss, or best friend). For example, a person might be in this situation: *I should be good* (ought-own self-guide), *I think my friend wants me to be bad* (ideal-friend self-guide), . . . *oh heck!* (whatever I do, I'll be left with a discrepancy with one or other of these personal standards). Now, you might say that this shouldn't be a problem - you simply tell your friend that you are going to be true to yourself, that you are not bound to meet another's wishes, and that regrettably, the friendship would be at risk if the friend insisted on keeping to this view. But what happens in the workplace? What if your work is important to you, but you think you ought to lead a balanced life - for the sake of your family, your health, and simply for the sake of living well. But your boss - or your organisation - wants you to be obsessed by your work, and to value nothing else? This is the sort of dilemma that faces many workers, and Self-discrepancy theory presents a way of characterising the dilemma and its possible consequences. So a strength of this theory is that it is effective in representing the complexity of human beings, including the human sociality, in a way that is comprehensible. There are many possible combinations of self-facets that might be discrepant, for example, actual(own)-ought(boss); actual(own)-actual(friend).

However, the most frequently researched have been actual-ideal and actual-ought discrepancies from a person's own perspective.

This all sounds reasonable, and perhaps interesting, but is this just Higgins' idea, or is there any empirical evidence to support this theory? Since 1987, researchers in North America, the United Kingdom, Spain, and Australia have measured self-discrepancies and emotions in different ways, and have demonstrated that self-discrepancy scores are reliably related to specific emotions, consistent with the predictions of the theory. Of course, as soon as I refer to 'self-discrepancy scores', many will ask, 'So how are these calculated and how valid are they?'

Measuring self-discrepancies

The phenomenological view directly gives rise to an idiographic, or individualised, measurement strategy for self-discrepancies, which Higgins (1987) has called the *Selves Questionnaire.* This asks research participants to generate their own set of words to describe the actual, ideal, and ought facets. Researchers could use a check-list of adjectives and ask participants to say which words describe them, but this list would be more a reflection of the words that researchers think are appropriate. However, we are interested in the first words that come to mind when a person is asked about these aspects of themselves, on the assumption these words will reflect features that are fairly important to the individual's self-definition. In practice, many research participants understandably find this task quite demanding, and I have had several helpful participants who have written the suggestion at the end of the Selves Questionnaire, that it would be much easier to respond to a set of given words.

After a list of up to 10 words has been written (for example, to describe the 'actual' self), participants are asked to rate the extent to which the words describe them (on a scale of 1 to 4). This procedure is repeated for each of the self-facets under investig-ation (e.g., ideal and ought self-guides). Pair-wise comparisons of the words in two lists, together with the extent ratings, are then used to calculate the discrepancy scores, using a formula described by Higgins (1987). The possible range for these scores is –10 (reflecting extreme congruence or consistency) to +20 (reflecting extreme discrepancy). In practice, research participants tend to score in the range –10 to +8, with group mean scores in the region of –3 (Francis, 1998a). Almost all the evidence to support the theory is from research using this measurement procedure.

2. Evidence for Self-discrepancy Theory

Although Higgins's original formulation of the theory was based on data from samples of undergraduate psychology students, the generality of the theory has been explored through a large range of studies. For example, the predicted relationships between self-discrepancies and emotions have been found in the following studies. Emotions experienced by new parents after the birth of a couple's first child was

predicted by discrepancies that were measured *before* the birth (Alexander & Higgins, 1993). Alexander and Higgins' findings were interesting in two ways. First, they showed that some of the experience of post-natal depression can be attributed to aspects of a mother's ideal self-guide even before a child is born. Second, they found that actual(own)-ought(spouse) discrepancy scores had a weaker impact on emotion score following the birth than before the birth. This is consistent with the idea that the importance of meeting the expectations of the partner is reduced after the first child is born.

In a study of adolescents, Higgins, Loeb and Ruble (1995) found that high school boys who have conflicts between self-guides from friends' and mothers' perspectives experience problems with self-esteem and with appropriate regulation of their behaviour. Other studies have examined self-discrepancies in relation to eating disorders. Strauman and Glenberg (1994) showed that distortion of one's body image (that is, overestimation of body size) is better predicted by actual-ideal discrepancy measures than by other self-concept measures. In addition, different forms of dis-ordered eating seem to be related to the type of discrepancy that is experienced (Strauman, Vookles, Berenstein, Chaiken, & Higgins, 1991). Specifically, actual-ideal discrepancies are associated with bulimic-related behaviours and actual-ought discrepancies are associated with anorexic-related behaviours. Similarly, in an Australian study, Boldero and Armatas (1995) reported that the types of strategies used to control body weight can be predicted from a knowledge of the individual's type of predominant self-discrepancy.

There also appear to be connections between the experience of self-discrepancies and biological and clinical outcomes. Research by Strauman, Lemieux, and Coe (1993) demonstrated that inducing negative emotions by activating people's self-dis-crepancies has negative immunological consequences. Exploration of the self-dis-crepancy status of clinically depressed and clinically anxious individuals (Scott & O'Hara, 1993; Strauman, 1992) has shown a unique association between actual-ideal discrepancies and depression, and between actual-ought discrepancies and anxiety. In a British study, Kinderman and Bentall (1996) found that clinically depressed patients had actual-ideal discrepancies of greater magnitude than either a group of paranoid patients or a normal control group. Furthermore, the paranoid group (in which participants were currently experiencing persecutory delusions) had very small discrepancies from their own standpoints, but large discrepancies between their self-perceptions and the views they believed their parents had of them. This raises the question, whether the discrepancies 'caused' the clinical condition, or whether the condition 'caused' the perception of the discrepancy, or indeed, whether they are both part of the syndrome. This question cannot be answered by clinical research to date, because of its essentially observational nature. However, psychologists have developed clinical intervention techniques that use self-discrepancy theory as

a basis for treatment of depression (Moretti, Higgins, & Feldman, 1990) and chronic task avoidance (Ferrari, Johnson & McCown, 1995).

In summary, self-discrepancy theory appears to apply to a wide range of people in a wide range of situations. My own work, commencing with my doctoral studies in 1993, asked the question, does self-discrepancy theory provide a useful framework for exploring workplace issues? I also came to studies of self-discrepancies at work in the belief that there could be some questions about the theory itself that could be effectively answered by applying the theory in a work context. For example, workers have a wide range of types of relationships with other people at work. Close friends, the boss or work supervisor, more distant friends, and even more distant service providers are all part of people's work experience. So I used the work context to explore the other perspective in self-discrepancy theory. For which types of relation-ships are discrepancies more important and less important? I will discuss this question and other questions about workplaces at some length in later sections of this paper. People in a number of workplaces have assisted my work by participating in a range of studies. I am indebted to the general staff of the University of Melbourne and La Trobe University, Bendigo, the staff and management of Bolton Brothers of Bendigo, staff at Overnewton Anglican Community College in Keilor, and a water management authority in another region of Victoria, for their willingness to be research participants.

More recently, in the past 12 months, I have expanded my research program to ask, in what way does the theory apply to older people? (Residents of the Bendigo Retirement Village have been my invaluable allies in this investigation.) In particular, when people look over life, is there a connection between retrospective self-discrepancies (for example, whether people feel that they met their perceived obligations when they were 40) and emotional health in older age? We are exploring other questions about health and self-discrepancies in a longitudinal study - the first of its kind - conducted in collaboration with the Stewart Cowen Community Rehabilitation Centre in Eaglehawk. In these ways, Self-discrepancy theory is being elaborated and extended, and it is also being used to identify ways to improve people's health and well-being. Before expanding on some of these findings, I wish to comment briefly on why emotions are an important and legitimate focus of investigation.

3. The Place of Emotions in Work Contexts

I have argued that the importance of self-discrepancies lies in their capacity to predict emotions, and also behaviour. Particularly in the context of the workplace, some people find a concern with emotions to be at best, puzzling, and at worst, inappropriate. Why, they argue, is it helpful to explore emotions at work? When one goes to work, one should leave emotions at home. An important aspect of working

in a professional manner is not to allow emotions to cloud one's judgement, to influence one's relationships, or to reduce one's efficiency. Let me expand, then, on what is meant by 'emotion' in this context. The first important distinction to make is between experiencing *emotions* and the experience of being *emotional*. The second distinction is between *experiencing* emotions and *expressing* those emotions. I will address each of these distinctions in turn.

Some types of emotional experience are important in the workplace because they enhance the experience of working and also the efficiency and effectiveness of the work that is done. These include enthusiasm (for example, about the work itself); patience (for example, in the face of difficult tasks or difficult people); trust (for example, in the benevolence of management); feeling friendly (for example, towards co-workers and clients); and feeling appreciated (for example, by management and co-workers). Other types of emotional experience are important in the workplace because they detract from the experience of working and also from the efficiency and effectiveness of the work that is done. These include stress or anxiety (about work load); anger (about management practices); feeling inadequate (in the face of difficult tasks or difficult people); feeling thwarted (when barriers prevent work from being done); and feeling tired (of it all). These feelings are different from a general style of behaviour that we call 'being emotional'. They are all appropriate, work-related experiences that may be legitimate responses to situations by people who care about their work. Indeed, if a worker experiences none of these feelings, we would be concerned that the worker is totally disengaged from the workplace and is not sufficiently motivated to be an effective member of the team!

Of course, it is not always appropriate to express certain negative emotions. Indeed, we teach our children when to express positive emotions ("Remember to smile when you thank Uncle Jason for giving you the lovely polka dot scooter.") and when to suppress negative emotions ("Stop crying now . . . or you won't be allowed to ride your new scooter.") We know that an important part of socialisation, including socialisation into a work culture, is the self-regulation of emotional expression. An extensive segment of the psychological literature is concerned with this very issue (e.g., Saarni, 1979). Let me emphasise, then, that Self-discrepancy theory is concerned with the *experience* of emotion - how people really feel - rather than with the expression of emotion - whether and how people communicate their feelings to those around them. It follows then, that it is reasonable for a worker to feel disappointed if an application for promotion is turned down, or frustrated if instructed to complete a series of trivial tasks that will make it impossible to achieve aspects of the work that are important. These are normal reactions by those who care about their work. In addition, as I will suggest below, even if a worker manages these emotions effectively, they do have an impact on worker behaviour, and on quality of work life.

Indeed, some recent thinking gives even greater importance to emotion in human functioning. In the same way that pain is used as a diagnostic tool to identify illness, emotion is taken by some to be important information about our immediate environment (e.g., Clore, 1994). Furthermore, because the experience of negative emotion is closely linked to the physiological system (think of the 'flight or flight' response), negative emotions give us *speedy* information that all is not well, that we need to attend to our circumstances, and that change is necessary. Negative emotions are thus important information, and have a good deal of survival value - if we take notice of them!

I hope, then, that you accept that the study of the discrepancy-emotion[1] link is a legitimate field of study in the workplace as well as in other domains.

4. My Self-discrepancy Research

This, then, is the background for my own self-discrepancy research. The first question I addressed concerned the perspective of the *other* in self-discrepancy theory.

Types of *other* and the influence of other-discrepancies

To avoid wordiness, I will refer to self-discrepancies that involve the *other* perspective as 'other-discrepancies'. Higgins (1987) specified that actual(own)-ideal(own) discrepancies are associated with feelings of disappointment, whereas actual(own)-ideal(other) discrepancies are associated with feelings of "concern over losing the esteem of others" (p. 323). Furthermore, actual(own)-ought(own) discrepancies are associated with feelings of guilt, whereas actual(own)-ought(other) discrepancies are associated with feeling threatened perhaps because of fear of punishment or social sanction. As I mentioned earlier, before accepting this principle, it seems important to ask, who is the 'other'? Higgins and his associates (Higgins, 1987) did ask their research participants to specify whose opinion is most important to them. Only those other-discrepancies involving important perspectives were associated with the predicted emotions. Much of my work has involved alternative ways of characterising *other* in terms of the theory.

In the context of the workplace, who might be an important *other* for a worker? There are two obvious possibilities: the supervisor, and the colleague; the boss, and the workmate. Whose perspective is more important in terms of the effect of discrepancies on emotions? I investigated this question among 183 employees of Melbourne University, representing a wide range of ages and occupations. Discrepancies were measured using the 'traditional' method (described by Higgins, 1987). Emotions were measured using a questionnaire that my Ph.D. supervisor and I designed specifically for workplace research (Francis & Jackson, 2000a). The questionnaire assesses a range of feelings, including the extent to which workers feel trusted and appreciated ('Social Approval' scale), angry and irritated ('Anger' scale), stressed

and anxious ('Worry' scale), or friendly and tolerant ('Social Harmony' scale). Figure 1 displays the results for Social Approval and Social Harmony. Participants who were substantially congruent with ought-other guides reported experiencing higher levels of Social Approval and Social Harmony than moderately congruent and discrepant participants, but only if the other person was the boss. There were no significant differences between Social Approval and Social Harmony scores as a function of discrepancy scores when the 'other' was the participant's best friend at work.
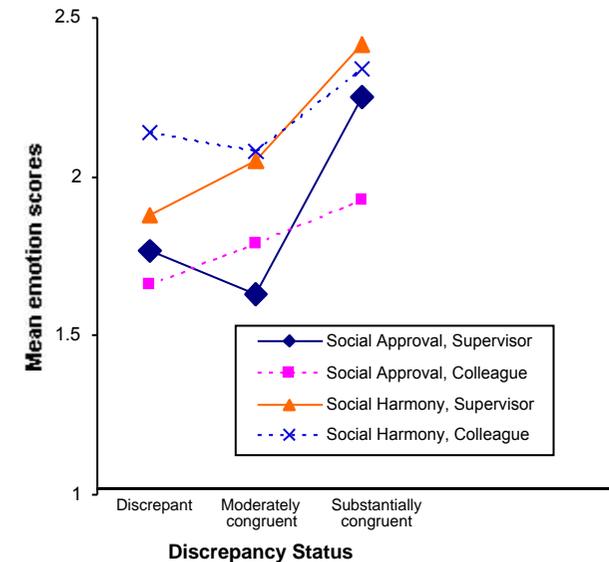

Figure 1. Scores for Social Approval and Social Harmony as a function of actual-ought (other) Discrepancy Status, where the other is the work supervisor or a close colleague (N = 183).
Note. Dotted lines join means that are not significantly different (at p<.05).

These results could be explained by a power/reinforcement principle. The workplace supervisor has the power to administer rewards and punishments if the worker is not meeting expectations. But, I wondered, could there be an alternative explanation? In a quest for exploring this issue further, I searched for systematic ways of characterising relationships between self and other that might clarify some of the mechanisms involved in vulnerability to other-discrepancies. In the workplace, people clearly experience more than just two types of relationships. One way of classifying a wider range of relationships is in terms of Alan Fiske's (1992) Relation Models theory.

Four types of relationships: Relational models theory

According to Fiske, there are four fundamental categories of relationships that apply at the dyadic, group and societal levels, and that regulate social interaction. These categories are labelled Communal Sharing (CS), Authority Ranking (AR), Equality Matching (EM), and Market Pricing (MP).

Communal Sharing (CS) relationships are the closest and most enduring relationships (e.g., close family relationships). "Everyone gives what they have, without keeping track of what individuals contribute" (Fiske, 1992, p. 694). In the context of this type of relationship, the self is defined in terms of the other. Individuals seek consensus with the other, desire to be like the other, and value kindness and selfless generosity towards the other. Because this is the closest type of relationship, I expected other-discrepancies in the context of these types of relationships to be associated with emotional vulnerability.

Authority Ranking (AR) relationships are based on hierarchy, unequal status, or unequal social power (e.g., relationships between work supervisors and their subordinates). As they are asymmetrical relationships, expectations for behaviour differ according to relative status. "Superiors . . . receive tribute from inferiors. Conversely, superiors have pastoral responsibility to provide for inferiors who are in need and to protect them." (Fiske, 1992, p. 694). Subordinates in this type of relationship obey orders, display loyalty, and try to please superiors. This may be a simplistic way to construe workplace relations, but it is likely that some of these AR principles would apply between those of unequal status in a workplace hierarchy. Because this is a relationship in which the worker is dependent on and less powerful than the supervisor, I expected other-discrepancies in the context of these types of relationships also to be associated with emotional vulnerability.

Equality Matching (EM) relationships are egalitarian relationships based on balanced exchange (e.g., relationships between non-intimate friends). Individuals "give and get back the same thing in return, with appropriate delay" (Fiske, 1992, p. 694), such as returning dinner invitations or taking turns to buy morning coffee. In the context of this type of relationship, the self is experienced as "a separate but co-equal peer" (p. 695). Because in EM relationships it is possible to distance oneself if things are not going well, I expected other-discrepancies in the context of these types of relationships to be less strongly associated with emotional vulnerability.

Market Pricing (MP) relationships are contractual relationships based on pay for commodities in proportion to what is received, (e.g., commercial relationships). Within this type of relationship, if a worker is paid per unit of time, there is a concern about productivity and the efficient use of time. In the context of the workplace, it may be that individuals who express their relationship in MP terms may be expressing a certain disengagement from the relationship. For example, a worker may have the

attitude: 'I sell my time and expertise to my supervisor; if I am underpaid, I will simply restore resource equilibrium by reducing the amount of work I do'. Thus, because MP relationships may themselves be an expression of distance, I expected other-discrepancies in the context of these types of relationships also to be less strongly associated with emotional vulnerability.

These four relationship types can be measured using a questionnaire designed by Haslam (1994). In a fascinating analysis of questionnaire responses, Haslam (1995) argued that the four types can be represented by two dimensions. The first dimension is Equality versus Inequality; the second dimension is Communality (high versus low), or ongoing Social Dependence versus Independence. Figure 2 illustrates the place of the four relationship types along the two dimensions.

High communality

Authority Ranking	Communal Sharing

Inequality ——————————————— **Equality**

Market Pricing	Equality Matching

Low communality

Figure 2. Haslam's (1995) two-factor analysis of four relationship types.

Assuming that the worker-supervisor relationship is fairly well described by the AR relationship, Figure 2 shows two alternative factors underlying a worker's vulnerability to discrepancies involving the supervisor. It could that inequality - the greater social power of the boss - underlies this vulnerability, as suggested above. Alternatively (or possibly as well), it could be that ongoing social dependence underlies this vulnerability. If workers were vulnerable to discrepancies in the context of MP relationships as well as AR relationships, this would be consistent with the 'inequality' explanation. However, if workers were vulnerable to discrepancies in the context of CS relationships as well as AR relationships, this would be consistent with the 'social dependence' explanation.
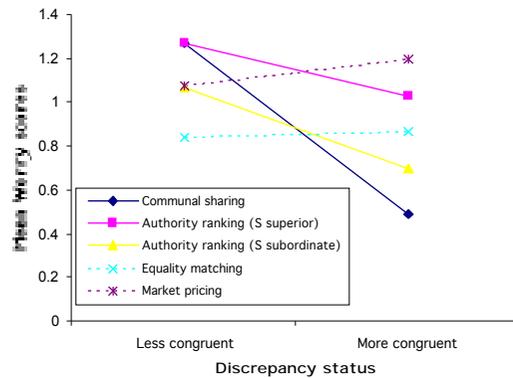
Figure 3. Scores for Worry as a function of actual-ought(other) Discrepancy Status, for five types of relationship (N = 183).
Note. Dotted lines join means that are not significantly different (at p<.05).

Figure 3 gives the results relating to this question. Actual-ought discrepancies influenced emotions, but only in the context of CS and AR relationships. Here, then, is preliminary evidence in favour of the 'social dependence' view of emotional vulnerability to discrepancies. (This point is discussed further in Francis & Jackson, 2000b). Interestingly, if this view is supportable, then supervisors will be also be vulnerable to discrepancies involving their subordinates, because supervisors are dependent on their workers' respect and co-operation to maintain their position. Figure 3 shows that this was indeed the case[2].

My research colleague and I have also demonstrated that a range of other variables influence people's vulnerability to discrepancies (Boldero & Francis, 2000). However, discussion of these issues is beyond the scope of this paper.

A range of pressures: 'Oughts' from a range of perspectives

More recently, I explored the 'oughts', often seen by workers as 'expectations' (Francis, 1999a), from a range of different types of perspectives. In many workplaces, workers are aware of several different sectors of the organisation, each of which might hold different expectations of worker behaviour. So it is possible that the *other* perspective could involve a group or category of people, not necessarily only individuals. I explored this possibility through a study of a private 'community' school in Keilor, an outer suburb of Melbourne. Teachers at this school were asked what they thought were the

expectations of the students, the parents, their colleagues, and school management. Emotions were measured using a checklist called the Revised Profile of Mood States (McNair, Lorr, & Droppleman, 1992). As shown in Figure 4, only discrepancies involving the students' perspective were related to emotion scores. Again, this is consistent with the 'social dependence' view, rather than the 'social power' view, of vulnerability to other-discrepancies.
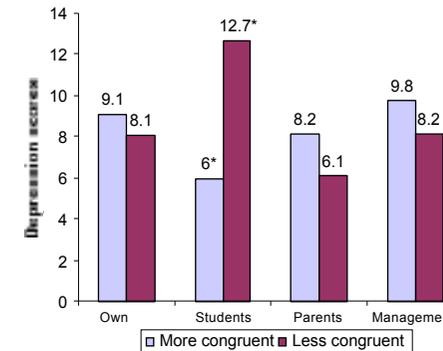

Figure 4. Scores for Depression as a function of actual-ought discrepancy status, for the 'own' perspective and three segments of the school community (N = 20).
*Note. * = means are significantly different (p < .05).*

I AM good, my boss thinks I'm bad . . . oh dear!

Another type of discrepancy involving another person has received almost no attention in the research literature. This is a comparison of what one thinks one is like *(I AM good),* with one's impression of the view of an important other *(but my boss thinks I'm bad . . . oh gee, I may need to rethink my future).* This could be referred to as an actual(own)-actual(other) discrepancy. A large portion of the relevant literature emphasises the place of other people in determining one's self-view, ranging from Cooley's (1902) notion of the 'looking glass self' through to Swann's (1990) argument that individuals constantly rely on other people to verify their self-views. In the light of this, it is particularly surprising that this aspect of self-discrepancy theory has been unexplored.

In my workplace study at Melbourne University, I investigated the effect that actual (own)-actual(other) (AA) discrepancies have on emotions experienced at work (Francis, 2000). AA discrepancy scores were negatively related to scores for Social Approval and Enthusiasm. This means that higher discrepancy scores were associated with lower emotion scores and vice versa. AA discrepancy scores were also positively related to scores for Anger and Weakness. This means that higher discrepancy scores were associated with higher scores for these emotions.

I should be good, I should be friendly, I should be clever . . .

Another aspect of the theory that has not been explored involves the word content of actual, ideal and ought aspects of the self. In a recent study in Bendigo, I asked the question, what are the sorts of words that workers use to describe themselves, their ideals and their oughts? This approach is appropriate for small samples[3]. It could also be a particularly important question for managers, as it is useful diagnostically. For example, using this type of content analysis, managers can check whether their specific expectations are understood by workers. In 1999 I received funding from the Australian Research Council to explore this question and related questions.

I used this idea in a study involving the staff at Bolton Bros of Bendigo, a retail organisation. The retail outlet had recently moved to larger premises, and the management team were interested in the way in which staff were adjusting to a number of changes that coincided with this. They were also interested in assessing any changes in staff attitudes following a 3-month team-building program.

Figures 5a and 5b show that the types of words that workers used to describe themselves and their ought self-guides fell into three broad categories: work attitudes (for example, 'conscientious', 'committed', 'dedicated'); work relationships (for example, 'friendly', 'co-operative', 'helpful'); and work skills (for example, 'organised', 'computer skills', 'knowledgable') Descriptions of the actual and ought facets were remarkably similar. In contrast, workers'ideals focused as well on wanting work outcomes (for example, 'successful', 'productive', 'well paid').

Figures 6a and 6b give an example of the way in which word content was used to assess change. Workers were asked to describe the new expectations of them in the context of the recent organisational changes. As a group, staff achieved a more balanced view of what was expected of them following the team-building program. Incidentally, consistency scores also improved following the program (Figure 7).

In summary, I have explored, elaborated and applied Self-discrepancy theory in a large range of work contexts. It seems to give a useful perspective on number of issues such as emotions at work (Francis, 1998b), job satisfaction (Francis, 1998c), and work behaviour (Francis, 1999b). A wide range of research has now established that people's feelings at work, or 'job affect,' strongly influence the *quality* of work inputs[4]. In the service industries, this translates not only to better quality of life for workers, but also profits for the organisation.

The issue of sampling concerned me throughout these investigations. Most of the evidence for the theory has been based on data provided by undergraduate psychology students in America. Even in my workplace research, the average ages of my samples have been in the 25-35 year range. In terms of my research program, the next question was, does the theory having something useful to say about the emotional experience of older people. In particular, as one looks back over life, how are people affected by past discrepancies relating to earlier stages of life? In general, I was also interested in whether the ideas of actual, ideal, and ought make sense to older people.

I'm good now, but I used to be bad . . . ouch!

A group of people who live at the Bendigo Retirement Village took part in this investigation. The project was funded by the Australian Research Council, so I was able to employ a research assistant, Sally-Anne Newson, who interviewed each participant. Our ethical guidelines specify that we must protect people's privacy by not presenting any individual results. The group results, however, were very interesting. Current discrepancies were related to current emotions in the manner specified by self-discrepancy theory (see Figure 8). Furthermore, retrospective actual-ought discrepancies (at age 40) were related to current levels of anxiety[5].

Now, there are limitations to the conclusions that we can validly draw on the basis of this study. First, it is well-known that when people try to remember past events, they may retrieve information from memory, or alternatively, they may reconstruct the event by using a series of plausible inferences. Reconstructions are less accurate than memories. Second, it is not clear whether the retrospective discrepancies cause current anxiety levels, or whether people who are currently anxious are more likely to recall actual-ought discrepancies from their past. However, the connection is an interesting one that could be explored further. The issue could have important implications for the quality of life of older people.

Indeed, as life expectancy in the population increases, there is a growing awareness that a greater length of life is no substitute for a better quality of life. Living well is important for people of all ages and in all conditions. A particular challenge in this regard is to achieve a good quality of life in the context of chronic illness.

If I would be well, I should do my exercises, but gee!

I have recently started to explore the relationship between self-discrepancies, health-related behaviour, and quality of emotional life with a group of patients with respiratory disease. Together with staff of the Bendigo Health Care Group, the study commenced in August, 2000, with patients at the Stewart Cowen Community Rehabilitation Centre. Since the project commenced, we have received funding from the Australian Research Council to cover some of the costs of conducting the project. An exciting achievement in the planning stages of this project was the development of a new way to measure self-discrepancies. This method involves a task that is easier for research participants, as well as having better psychometric properties than the traditional measure. The method asks the participant to estimate where the actual, ideal or ought facets are placed along a line, whose poles are labelled by words that the participant has generated earlier (see Figure 9). I was pleased to pres-

ent some findings using this method at the annual conference of the Australian Psychological Society, held in Canberra in October, 2000, with Stewart Cowen staff as co-authors (Francis, Boldero, Newson, Coffey & Brydon, 2000).
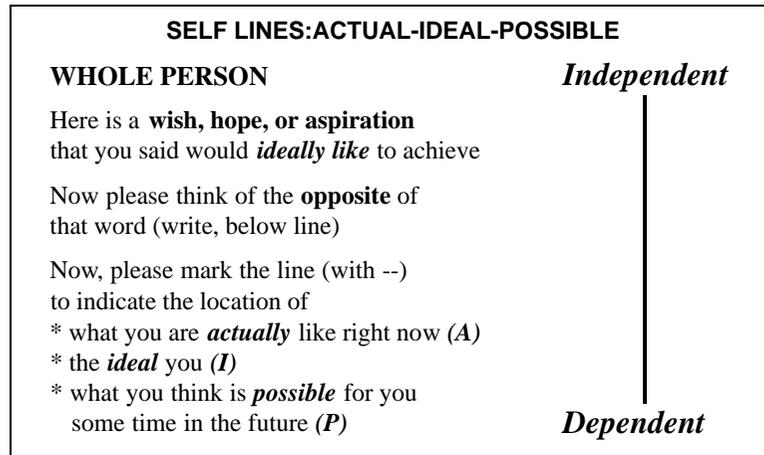

SELF LINES:ACTUAL-IDEAL-POSSIBLE

WHOLE PERSON   *Independent*

Here is a **wish, hope, or aspiration**
that you said would *ideally like* to achieve

Now please think of the **opposite** of
that word (write, below line)

Now, please mark the line (with --)
to indicate the location of
* what you are *actually* like right now *(A)*
* the *ideal* you *(I)*
* what you think is *possible* for you
   some time in the future *(P)*   **Dependent**

Figure 9. 'Self Lines': A new measure of self-discrepancies.

I should be good, I'm not good yet, so I'll change

Initial results from the Stewart Cowen study were consistent with the propositions of Self-discrepancy theory, but the more interesting findings are yet to come. To our knowledge, this is the first longitudinal study conducted in the self-discrepancy field. This is important because the theory makes claims about behaviour that can be studied only by examining changes in a person's behaviour over time. The idea is that self-discrepancies are associated with negative emotions and thus motivate the person to engage in discrepancy-reducing behaviour. This idea seems logical but is extremely simplistic (as discussed in Boldero & Francis, 1999). Furthermore, in the case of chronic illness, with the best possible motivation to engage in appropriate health-related behaviour, the patient has to be content with maximising quality of life rather than expecting full recovery. This of course has implications for motivation.

Nevertheless, we are interested in exploring the individual self-discrepancy profiles that are associated with the best possible emotional adjustment to pulmonary disease and also the best possible disease-management behaviour. Furthermore, actual-ought discrepancies are proposed to be associated with avoidance behaviours (not doing the wrong thing), whereas actual-ideal discrepancies are proposed to be associated with approach behaviours (doing something to achieve the aspiration). Findings from this study will enable us to identify those people at greatest risk of giving up on their

everyday management behaviours, and also those people who are most likely to benefit from the rehabilitation program offered by the Stewart Cowen Centre. Eventually, we aim to devise discrepancy-based interventions that are tailored to each person's particular behavioural preferences (approach or avoidance). These interventions will assist people to manage chronic illness successfully by adapting their lifestyle while maintaining a good quality of life.

I should be good, I would be good, but gee!

A fascinating aspect of the use of the *modal* verbs (e.g., would, should, could) in the title of this paper, is that their ambiguity offers a range of interpretations. I mentioned that it is simplistic to assume that self-discrepancies motivate or 'drive' appropriate 'discrepancy-reduction' behaviour. By changing the order of words of our title, so that it corresponds with the original words of the song, we can see one illustration of an alternative way of coping with self-discrepancies. *I should be good* (ought), *I would be good* (I intend to do better), *but gee* (I have a good excuse). One of the next steps in this research program will be to explore in what circumstances people really do strive to reduce their discrepancies (we could refer to this as 'behavioural regulation of discrepancies'), and in what circumstances people make excuses or reduce the importance of the discrepancy ('cognitive regulation of discrepancies'). It may even be that some people just put up with an important discrepancy by coping with the negative emotions that it produces, by, for instance, adopting stress management techniques ('emotional regulation of discrepancies'). Through the exploration of questions such as these, this theory is still being elaborated and developed through ongoing research programs in Bendigo and Melbourne, and also internationally.

5. I would do Research, I could do Research, but Help!

I would like to highlight at this point that all this research activity is the mere tip of an iceberg. Research occurs in the context of particular supportive communities. I refer to the university community and the local community where the research is conducted. It would not be possible to explore any of these ideas without the strenuous efforts and support of a large range of people in these communities, and I want to acknowledge the part that many others play in this process.

First of all, there is a large infrastructure of La Trobe University that is devoted to the research effort. This is the Research and Graduate Studies Office of the university, which provides administrative support under the leadership of the Deputy Vice-Chancellor (Research), Professor Fred Smith. For the Bendigo Faculty, Professor Terry Mills fulfils this function at the local level. Terry Mills has been a valued adviser to me in the development of my research career. I have mentioned through-out this paper a number of projects that have the financial support of the Australian Research Council. Other research funding is provided directly by La Trobe University,

and we are of course increasingly encouraged to seek funding from other sources as well. These funds cover the costs of conducting the research, including the cost of materials and the employment of research assistants. It is worth noting that the research process does provide jobs locally, and that graduates and post-graduate students of La Trobe University Bendigo have high quality and highly valued research skills in this context. I would like to pay tribute to the research assistants who have contributed to the research I have described here, as well as other research projects I am working on.

I mentioned earlier that some of our research work is constrained by ethical standards. An extremely important aspect of research conducted by universities is that our highest priority is the ethical treatment of research participants and the data they provide. This involves the members of ethics committees doing a huge amount of tough work in the form of assessing every piece of research at the proposal stage, and the sometimes unpopular work of requiring changes to some projects before the research can proceed. In particular, I want to thank the Ethics Committee of the Bendigo Faculty at La Trobe University, who have up to this point processed dozens of applications from me personally, and hundreds from other university staff. Similarly, the Ethics Committee of the Bendigo Health Care Group work to ensure that their patients are always treated appropriately in the context of health care research. These committee members spend huge amounts of time, often in a voluntary capacity, so that the good name of the research process in this region can be maintained. The flow-on effects of this in terms of people's willingness to participate in research are obvious. I personally appreciate the intelligent, thorough and positive way these committees have facilitated my own research.

Naturally, research does not occur without research participants. I am extremely grateful to the people of Bendigo who have volunteered to take part in the studies I have described here. This has made this type of work a very rewarding experience for me and for my colleagues and assistants. In particular, students and staff at La Trobe University Bendigo, students and staff at the University of Melbourne, staff at Bolton Bros, Overnewton Anglican Community College, patients of the Stewart Cowen Centre, and residents of the Bendigo Village have been generous in sharing their time and themselves, as part of this research process.

This paper has explained some of the current developments in Self-discrepancy theory. It is a living, growing theory that I believe has important implications for workplace behaviour (including management practice), for health-related behaviour, and for quality of life issues for people of all ages. At a broader level, I have tried to demonstrate that it is possible to use systematic and objective research methods to explore the ways in which individuals perceive their social world. The consequences or correlates of these perceptions are specified by Self-discrepancy theory, but are still being elaborated and tested. The story is not yet complete.

ENDNOTES

1 For the sake of simplicity I am using the term 'emotion' to cover emotions, moods, and feelings, although the literature does distinguish between these three. Self-discrepancy theory applies to all these types of affective states.

2 This finding should be interpreted with caution, however, because of the small number of participants in the 'other as subordinate' category in this sample.

3 In terms of statistical analysis, findings from small samples may not be reliable (i.e., replicable). However, because each participant generates up to 40 words in a typical self-discrepancy question-naire, the combined pattern of descriptions across a small sample can be quite informative at the descriptive level.

4 In contrast, productivity, or quantity of work, appears to be unrelated to job affect (Cranny, Smith & Stone, 1992).

5 $r(18) = 0.30$, $p < .05$ (one-tailed). In view of the small sample, this result would need to be replicated before it could be regarded as reliable.

References

Alexander, M.J., & Higgins, E.T. (1993). Emotional trade-offs of becoming a parent: How social roles influence self-discrepancy effects. *Journal of Personality and Social Psychology,* 65, 1259-1269.

Boldero, J., & Armatas, C. (1995). Body shape dissatisfaction and exercise partici pation: The consequences of actual-ought and actual-ideal discrepancies. *Australian Journal of Psychology,* 47 (Supplement), 31.

Boldero, J., & Francis, J. (1999). Ideals, oughts, and self-regulation: Are there qualitatively distinct self-guides? *Asian Journal of Social Psychology,* 2, 343-355.

Boldero, J., & Francis, J. (2000). When are self-discrepancies related to emotion? The moderating roles of self-guide importance, location relevance, and social self-domain importance. *Journal of Personality and Social Psychology,* 78, 38-52.

Boldero, J, & Francis, J. (2001). *Goals, standards, and the self: Reference values serving different functions.* (Submitted for review.)

Clore, G.C. (1994). Why emotions are felt. In P. Ekman & R.J. Davidson (Eds), *The nature of emotion* (pp. 103-111). New York: Oxford University Press.

Cooley, C.H. (1902). *Human nature and the social order*. New York: Scribner.

Cranny, C.J., Smith, P.C., & Stone, E.F. (1992). Consequences of job satisfaction. In C.J. Cranny, P.C. Smith, & E.F. Stone (Eds), *Job satisfaction: How people feel about their jobs and how it affects their performance* (pp. 119-1221). New York: Lexington Books.

Derogatis, L.R. (1975). *Symptom Checklist-90-R.* Minneapolis, MN: National Computer Systems

Ferrari, J.R., Johnson, J.L., & McCown, W.G. (1995). *Procrastination and task avoidance.* New York: Plenum Press.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Fiske, A.P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review*, 99, 689-723.

Francis, J. (1998a). *Self-discrepancy and emotion in the workplace: An exploration of the place of the 'other' in self-discrepancy theory.* Unpublished doctoral dissertation. The University of Melbourne.

Francis, J. (1998b). Self-discrepancy in the workplace: An interpersonal perspective. *Proceedings of the British Psychological Society,* 107.

Francis, J. (1998c). Workplace affect and job satisfaction as a function of inter-personal discrepancies in the workplace. *Australian Journal of Psychology, 50* (Supplement), 84.

Francis, J. (1999a). *Meeting standards: School employees' responses to a range of expectations.* Unpublished industry report: Overnewton Anglican Community College, Keilor.

Francis, J. (1999b). Self-discrepancies and emotion in the workplace as predictors of leave-taking behaviour. *Australian Journal of Psychology, 51* (Supplement), 119.

Francis J. (1999c). *Reacting to change: Employees' responses to altered work expectations*. Unpublished industry report: Bolton Bros, Bendigo.

Francis (2000). *Self-discrepancy and others: Emotional correlates of others'failure to verify self-views.* (Submitted for review.)

Francis, J., Boldero, J., Newson, S., Brydon, V., & Coffey, T. (2000). Assessing self-discrepancies by interview: reliability and validity of interview schedules trialed with healthy elderly individuals and pulmonary rehabilitation patients. *Australian Journal of Psychology, 52*(Supplement), 81.

Francis, J. & Jackson H.J. (2000a). *The Feelings at Work Scale: Theoretical basis, development of the instrument and preliminary validity testing.* (Submitted for review.)

Francis, J. & Jackson, H.J. (2000b). *Dependency relations, not power relations, influence emotional vulnerability to self-discrepancies.* (Submitted for review.)

Francis, J. & Newson, S. (2000). The utility of self-discrepancy theory as a frame work for supporting workplace training: evaluation of a team-building program and identification of training needs in a range of industries. *Australian Journal of Psychology, 52*(Supplement), 81.

Gibbons, F.X., Eggleston, T.J., & Benthin, A.C. (1997). Cognitive reactions to smoking relapse: The reciprocal relation between dissonance and self-esteem. *Journal of Personality and Social Psychology, 72*, 184-195.

Haslam, N. (1994). Categories of social relationship. *Cognition,* 53, 59-90.

Haslam, N. (1995). Factor structure of social relationships: An examination of relational models and resource exchange theories. *Journal of Social and Personal Relationships*, 12, 217-227.

Higgins, E.T. (1987). Self-discrepancy theory: A theory relating self and affect. *Psychological Review,* 94, 319-340.

Higgins, E.T., Loeb, I., & Ruble, D.N. (1995). The four As of life transition effects: Attention, accessibility, adaptation, and adjustment. *Social Cognition*, 13, 215-242.

Kinderman, P., & Bentall, R.P. (1996). Self-discrepancies and persecutory delusions: Evidence for a model of paranoid ideation. *Journal of Abnormal Psychology*, 105, 106-113.

McNair, D.M., Lorr, M., & Droppleman, L.F. (1992). *Edits manual for the Profile of Mood States,* Revised. San Diego, CA: Educational and Industrial Testing Service.

Moretti, M.M., Higgins, E.T., & Feldman, L.A. (1990). The self-system in depression: Conceptualization and treatment. In C.D. McCann & N.S. Endler (Eds), *Depression: New directions in theory, research, and practice* (pp. 127-156). Toronto: Wall & Emerson, Inc.

Saarni, C. (1979). Children's understanding of display rules for expressive behavior. *Developmental Psychology*, 15, 424-429.

Scott, L. & O'Hara, M.W. (1993). Self-discrepancies in clinically anxious and depressed university students. *Journal of Abnormal Psychology*, 102, 282-287.

Strauman, T.J. (1992). Self-guides, autobiographical memory, and anxiety and dysphoria: Toward a cognitive model of vulnerability to distress. *Journal of Abnormal Psychology,* 101, 87-95.

Strauman, T.J., & Glenberg, A.M. (1994). Self-concept and body image disturbance: Which self-beliefs predict body size overestimation? *Cognitive Therapy and Research, 18,* 105-125.

Strauman, T.J., Lemieux, A.M., & Coe, C.L. (1993). Self-discrepancy and natural killer cell activity: Immunological consequences of negative self-evaluation. *Journal of Personality and Social Psychology*, 64, 1042-1052.

Strauman, T.J., Vookles, J., Berenstein, V., Chaiken, S., & Higgins, E.T. (1991). Self-discrepancies and vulnerability to body dissatisfaction and disordered eating. *Journal of Personality and Social Psychology*, 61, 946-956.

Swann, W.B. (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: Foundations of social behavior* (Vol.2 , pp. 408-448). New York: Guilford Press.

Swann, W.B., Wenzlaff, R.M., Krull, D.S., & Pelham, B.W. (1992). Allure of negative feedback: Self-verification strivings among depressed persons. *Journal of Abnormal Psychology*, 101, 293-306.

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The annual Worner Research Lecture forms a series of public lectures at La Trobe University, Bendigo. The aim of the series is to publicise research carried out at La Trobe University, Bendigo.

The University is proud to be associated with the Worner brothers, Howard, Neil and Hill, who were students at Bendigo School of Mines, a forerunner of La Trobe University, Bendigo. The three brothers were raised on a farm in the Mallee. In the early 1930s, they studied at Bendigo School of Mines: Howard and Hill for a Diploma of Industrial Chemistry and Neil for a Diploma of Civil Engineering. All three brothers later won prestigious scholarships to The University of Melbourne.

Howard Worner's distinguished career in academia and industry led him to his present honorary professorship at the University of Wollongong, where he has been Director of the Microwave Applications Institute since 1989. In 1994, La Trobe University conferred on him the degree of Doctor of Science (honoris causa).

Neil Worner pursued a career in civil engineering, including the position of Chief Civil Engineer with the Snowy Mountains Hydro-Electric Authority. His career continued in senior and advisory capacities in Australia and overseas on projects such as the design and construction of major dams.

Hill Worner's career included several years on the Executive of the CSIRO and 22 years as Professor of Metallurgy and three as Dean of Engineering at The University of Melbourne, where he is now Professor Emeritus in Engineering.

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2001 Jill Francis, I Would be Good, I Should be Good, but gee, oh gee oh gee: The development of a psychological theory