Career Psychology:

A Cultural Approach for India

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Abstract

This paper sets out to address an important aspect of human development, namely, the processes by which career choices are made. Highlighting the necessity of considering the unique cultural, social, and economic factors that influence career development in the Indian context, the paper presents the cultural preparation process model as a potential framework for the development of a career psychology for India. Data from the Work Orientations and Responses to Career Choices: Indian Regional Survey (WORCC-IRS) is presented to illustrate the model and to discuss occupational and career interests which are constructs that are central to career guidance. Data is provided to show that cultural factors such as parental approval and the attribution of prestige have a strong influence on the formation of occupational and career interests. The paper concludes with a discussion on the importance of creating a platform for the emergence of an Indian career psychology that integrates into its purview the diverse factors that influence career development in the Indian context.

Keywords: acculturation, career psychology, cultural learning, cultural preparation process, enculturation, human development, interest, parent, prestige, social organisation

Introduction

Work and career are closely interwoven with human development across almost all cultures. Early theories of career development described it to be the result of a process of maturation whereby the individual progresses in a "normative" manner, resolving developmental tasks and achieving developmental milestones. Contemporary ideas of human development have moved away from the supposition that development comprises an invariant sequence of stages, through which the individual must move. In real life, development does not seem to occur in this predictable and rational manner between clearly defined age ranges. An important observation made is that earlier developmental models do not adequately address the vast range of individual and contextual differences and that the attitudes of significant others in the adolescent's life and social expectations could play a significant role in shaping career orientations (Arulmani & Nag-Arulmani, 2004). Blustein (1988) makes the point that the resolution of career developmental tasks is in effect influenced by the simultaneous operation of various historical factors (e.g., economic slump or boom) and cultural factors (e.g. prestige attributes of an occupation). In other words, "non-normative" factors that are not related to the process of maturation could play a significant role in career development. With a view to delineating constructs that could inform an indigenous career psychology, this paper presents a culturally mediated model of career development and data from a regional survey that throws light on Indian young people's orientation to work and career choice.

Origins of the Notion of Career

The evolution of work has been influenced by the intermingling of a wide range of social, cultural, and economic forces. In most civilizations, occupations and trades ran in families and occupational skills were transferred to the young by the adults within the family or through professional guilds (e.g., Tilgher, 1930). The momentous social and economic

transformations caused by the Industrial Revolution and the Protestant Reformation in Western societies led to these long-established customs becoming redundant in comparison to earlier times when occupational role allocation was almost automatic. People could now approach work as a vehicle for personal growth and development, closely connected with the fulfilment of personal desires. Thus was born the concept of *career*, which tends in a Western context to be a "personal engagement with the world of work characterized by the exercise of volition and the delineation of personal suitability, requiring preparation and specialization for ongoing, lifelong development" (Arulmani, Bakshi, Leong, & Watts, in press). With new occupations rapidly emerging, fitting people to jobs based on their abilities became an urgent requirement and *vocational/career guidance* appeared as a method to support the new work ethos (e.g., Parsons, 1909). The earliest form of career psychology focused on developing systems whereby people's traits and characteristics could be reliably identified and matched to jobs that corresponded to these personal features. In the past, when the allocation of work roles was grounded upon social and cultural customs, the necessity for this kind of counselling and guidance was perhaps not required. Today, in certain cultures and economies, the would be worker has before him/her a wide variety of occupational options and opportunities and most members of these cultures enjoy the freedom to select and follow careers of their choice. Career guidance and counselling has its being in the dynamic interaction that is possible between occupational opportunities and the individual's freedom of choice. Since its emergence about a century ago, the field has rapidly developed and grown in the sophistication with which it has supported individuals' engagement with the world of work.

Manifestation of Career

A key point to be noted is that career manifested itself as an aspect of work in a Western, industrialised context in response to powerful social and economic transformations

that were peculiar to those contexts. Further, these are cultures founded on the principles of

materialistic individualism that celebrate the individual and his or her desires, interests, and

attitudes. The freedom of the individual for self-determination is a deeply cherished and

protected value. In cultures and economies that did not come directly under such influences,

human engagement with work seems to have proceeded as it had for centuries earlier (e.g.,

Donkin, 2010; Thapar, 1966). Large sections of the global workforce, including those in the

so called emerging economics, are even today characterised by pre-industrial features and

career as it has been portrayed above does not exist in these cultures and economies. More

often than not, these are cultures that are collectivistic in their organisation where factors

other than personal desires influence the individual's engagement with work. At the same

time, the forces of Westernisation and the more recent incursions, modernisation and

globalization, have been such that the notion of a personal career has become a reality in

many more parts of the world. It has been observed, therefore, that:

> Although historically the notion of career has its roots in a Western, individualistic,
>
> industrialized context, and was nurtured by a work ethic that promoted freedom of
>
> choice, global forces over the years have transported it also to many other cultural and
>
> economic locations. (Arulmani, Bakshi, Leong, & Watts, in press).

It seems, therefore, that career broadly manifests itself in two contexts: social,

cultural, and economic settings to which it is indigenous and those to which it is historically

and culturally unfamiliar. The former is a more natural, contextually consistent

manifestation. The latter could be the consequence of necessity resulting from global

transformations, prompting the observation that:

> The delineation of career from work lies along a continuum. At one end is "career" in
>
> its fully developed form, at the other is a complete absence of the notion of career and

along the continuum are various manifestations of the idea of career (Arulmani, Bakshi, Leong, & Watts, in press).

As will be discussed in greater detail below, the psychosocial, cultural, and economic features of the local context also have the potential to shape the manifestation of career. Our research has indicated, for example, that an Indian family from a lower socioeconomic status (SES) background tends to lay a lower emphasis on investing resources in education as a pathway to a career when compared to Indian middle class groups (e.g., Arulmani, 2011). Hence, the matter of considering a career for his children based on their interests and talents would be almost alien for a semi-literate, informally trained mason working on a Bangalore construction site. He would perhaps be more concerned with bringing his son to work as soon as possible so that he could learn the trade and contribute to the family income. In another context, given the long history in their economy of vocationally oriented apprenticeship training, Austrian young people might be entirely agreeable to considering vocationally oriented careers (e.g., Rauner, 2009). In contrast, given the culturally mediated forces of occupational prestige, vocational options may not even be considered as a potential career path in an urban, Indian middle class home (e.g., Arulmani, 2009a). The point being made here is that while the notion of career is becoming increasingly widespread, it must be acknowledged that the nature of its manifestation, the meaning attributed to it, and the manner in which individuals and groups engage with career can vary from one context to another. For one group, the focus of career guidance may be to help an individual discover in which occupational area (e.g., commercial art, biotechnology or law) he/she should specialise. In another setting, career guidance may be to help the members of a community identify and gain modern skills to manage their traditional, rural occupations in a viable manner.

Theories, Models, and Methods of Practice: Current State of Relevance

The advancement of the field of career psychology in Western contexts has been vigorous and has led to the formulation of a great variety of theories and approaches to practice ranging from the trait-factor (e.g., Holland, 1997), developmental (e.g., Super, 1990), and social cognitive (e.g. Lent, 1994), to the more recent systems theory and constructivist positions (e.g., McMahon, 2005). However, some of the world's largest human resource pools in the world lie in the economically developing world (United Nations Department of Economic and Social Affairs, 2011). While the need for career guidance is rapidly rising in these settings, the notion of career is not indigenous to many of these contexts. In the absence of contextually defined meanings and locally generated data, career guidance in these contexts is driven by definitions of career that have been transposed upon these cultures. Although newly emerging cultural approaches (e.g., Leong, 2011) are making a concerted effort, very little attention has been directed toward understanding orientations to work and the manifestation of career in these environments. Given the reality that career now exists outside the contexts in which it was born, the challenge is to break new ground for cultures and economies to which career has not been indigenous.

The Cultural Preparation Process Model of Career Development

Cultural Preparedness

Anthropological and sociological definitions of culture portray it to be human phenomena that cannot be attributed to genetic or biological inheritance, but to that repository of cohesive and assimilated systems of learned behaviour patterns characterizing the members of a social group, including the symbolic representation of experiences and the distinct ways in which groups of people classify and represent their collective experience (e.g., Durkheim, 1893/1984; Hoebel, 1966; van de Walle, 2008). *Cultural learning* is a uniquely human feature whereby the learner is not only learning about things from other persons but is also learning things through them and at the same time becoming a vehicle for

the transmission of these learnings to others (Tomasello, 2001). *Cultural preparedness* refers to the bidirectional process of influence between a social group and its members, whereby a society directly or indirectly, formally or informally, transmits to its members, the norms and customs by which it characterizes itself and whereby the dynamics of lifelong cultural learning facilitate the absorbing of attitudes, convictions, opinions, and notions which cohere together to create mindsets and beliefs that guide a people's relationship with themselves and their environment. Extending the notion of cultural preparedness to the practice of counselling and guidance, Arulmani (2007) points out that the constructs that undergird Western theories of counselling are embedded in the realities of Western contexts. Methods of counselling that emerged in these settings were in effect developed by a people, for a people with certain cultural orientations. One of the reasons for the success of these approaches could be that both the authors of the service as well as the consumers of the service have been prepared by their cultures to offer and partake of the service in a similar manner. They share a comparable vocabulary of values and cherish a particular approach to life. It is against this background of cultural preparedness that conditions could be created for an approach to counselling that were *necessary and sufficient* for that context. However, the same conditions may be neither necessary nor sufficient for a people who have a different cultural heritage. For example, a definition of career that cuts against collectivistic orientations may not find resonance amongst a people whose culture has prepared them over the ages to approach their existence in a community oriented manner and where the exercise of independent decision making is not entirely the prerogative of the individual. The cultural preparedness approach is offered in this writing as a framework that could be considered for the development of culturally resonant theorising and models of practice. The salient principles of the cultural preparation process model of career development is described next (for a more detailed discussion see Arulmani, in press).

Proposition 1: Global Trends and Transformations

The model proposes that global conditions, trends, and transformations form the backdrop against which human engagement with work and career occurs. These are major external factors that affect the individual/group but over which the individual/group has little or no control. These factors could include social philosophies, economic trends, political changes, technological advances, and natural phenomena. For example, economic liberalisation and globalisation have brought a wide range of new occupations into emerging economies that have a significant impact on career development processes in these economies.

Proposition 2: Influences on Preparedness

Moving from global processes to the level of the individual/group, the model proposes that preparedness for career development is influenced by the following three key factors:

Patterns of social organization. Individualism and collectivism have been extensively discussed and the literature is rich with descriptions and definitions (see Hofstede, 1980; Triandis, 1995). Summarizing this literature, Oyserman, Coon, and Kemmelmeier (2002) describe the central features of individualism to be a belief in personal uniqueness and independence while interdependence, duty to the in-group, and maintaining harmony are the main characteristics of collectivism. The model suggests that individualistic-collectivistic cultural environments could differentially shape the individual's cultural preparedness. A concrete example is the individual's expression of career interests, which is a central construct in career counselling (discussed in greater detail below). In a collectivistic context, the individual's formation and articulation of vocational interests might in fact be significantly influenced by the values and beliefs of the collective. In an individualistic situation, however, it is more probable that the formation of interests is relatively more

independent of the collective and that the individual has greater freedom to express personal preferences rather than those favoured and endorsed by the community.

Patterns of value attribution. The worth, importance, or significance bestowed upon phenomena within a certain cultural group are key influences on cultural preparedness. The meaning and purpose attributed to work and career could be influenced by prevailing mindsets, social and moral frames of reference. Social cognitive environments foster the development of career beliefs: attitudes and opinions that reflect career stereotypes (Arulmani, 2011; Arulmani & Nag-Arulmani, 2004; Krumboltz, 1994). For example, the Gandhian view emphasises the belief that work has innate value and must be pursued for its own sake. Such social cognitions, in a distinctly identifiable manner, cause the attribution of value to various aspects of work and career which could guide and influence people's work behaviours and their orientation to career development. The impact of value attributions on the career preparation process can also be marked and critical (Arulmani & Abdulla, 2007; Arulmani & Nag-Arulmani, 2004).

Processes of role allocation. Relationships within a social group are defined by processes of role allocation. The acting out of a role is regulated by a reciprocal give-receive dynamic between the individual and society and is characterized by culturally defined obligations and expectations (see Merton, 1957). Focusing on *occupational* role allocation, this model proposes that cultural preparedness for occupational engagement is influenced by the manner in which people are assigned, achieve, or assume occupational roles. The interaction between gender and career provides another strong example. In certain cultures, the primary role ascribed upon the female is that of wife and mother. The definite, cultural expectation is that any career roles she wishes to realise are subsumed under the primary ascribed role.

Proposition 3: The Mediation of Cultural Learning

The third proposition of the cultural preparation process model suggests that the capacity for cultural learning mediates the interaction between global trends (described in Proposition 1) and influences on preparedness (described in Proposition 2). For example, the tsunami that struck the coasts of South India a few years ago destroyed the wooden boats of hundreds of fishermen and severely crippled their livelihoods. Rehabilitation efforts brought the practitioners of this traditional occupation to a cross road: They were offered new boats but these boats were made of fibre glass, a material that was entirely new to them. Interviews with a small cross section of this group revealed that initial scepticism was almost unanimous amongst this group (Arulmani, 2006). Long held beliefs pertaining to the "way fishing ought to be conducted" and "displeasing the gods" came into play. At the same time, having lost everything they did not have the means to build the kind of boats they had traditionally used. Left with no other alternative, a few of them were brave enough to try the new boats. They found that they needed to learn new skills to handle these boats. They also found that the new vessels had advantages. Gradually, more and more fishermen, learning from each other, developed mastery over the new boats. In this illustration, the tsunami represents the impact of global forces affecting occupation and livelihood. The scepticism and unwillingness to accept an innovation represents context specific factors that affect preparedness. The learning through experimentation, the adaption of skills to a new task, and the transmission of this learning to others demonstrate the mediation of cultural learning.

Proposition 4: Enculturation and the Emergence of Equilibrium

The cultural learning process by which a social group forms and shapes its individual members to conform to its conventions has been described to be *enculturation* (e.g., Grusec & Hastings, 2007). Within the cultural preparation process model, enculturation is explained as the process by which people acquire the behaviours that are obligatory in that culture—for specific practices. In the example of the fishermen cited above, their reference to culturally

embedded beliefs related to their occupation and their initial refusal to accept fibre glass is an illustration of enculturated behaviour. The forces of enculturation prepare the members of a culture to respond to each other, their surroundings, other communities, and to global trends in a unique and distinctive manner. Within the model, the socializing forces of enculturation interact continuously and dynamically, individually or severally with global trends (Proposition 1), the three factors that influence preparedness (Proposition 2), and through the processes of cultural learning (Proposition 3), place the individual/group in a unique state of equilibrium to engage with career development. This is the individual/group's cultural preparation status equilibrium in relation to career development. For example, the cultural preparation status equilibrium of the fishermen in the illustration above was such that they were committed to the belief that wooden boats were essential to practice their occupation.

Proposition 5: Acculturation and the Alteration of Equilibrium. If enculturation describes internally occurring processes that influence cultural preparedness, acculturation describes how it is influenced by external processes when societies come into contact with each other. The nature of acculturation could be envisioned to lie along a continuum. At one end, acculturation could be entirely reciprocal whereby both cultures are mutually influenced. At the other end, attitudes of cultural imperialism and ethnocentric orientations could deliberately ensure that the dominant culture unidirectionally transfers its values and norms to a less dominant one (Tomlinson, 1991; Xue, 2008). Also, secular, global trends could make acculturation a necessity. For example, the fishermen in the illustration had no choice other than to adapt to a new type of boat. In its fifth and final proposition, the cultural preparation process model points out that acculturation has a critical influence on cultural preparedness. If enculturation creates a certain status or quality of cultural preparedness, the necessity for acculturation can cause shifts in cultural preparedness, which may or may not be beneficial to the culture that is required to acculturate. As with enculturation, the forces of acculturation

interact continuously and dynamically, individually or severally, with global trends and the three factors that influence preparedness. Acculturative forces that are consonant with the individual/group's cultural preparation status would support, enhance, or further stabilize the existing career preparation status equilibrium. Dissonance would mean that the forces of acculturation disturb the existing career preparation status equilibrium.

The foregoing has attempted to draw attention to constructs that could have a bearing on a career psychology for the Indian context. We now present data from an Indian survey to throw further light on some of these propositions.

Work Orientations and Responses to Career Choices - Indian Regional Survey (WORCC-IRS): Influences on Occupational and Career Interests

WORCC-IRS was designed to collect information about Indian young people's orientations to work and livelihood and the manner in which they make career choices (Arulmani & Nag-Arulmani, 2005). The survey covered 13 regions of India and was executed in seven languages. Useful information emerged from this survey in relation to the impact of socioeconomic status, influence of social cognitions such as career beliefs, perception of career development barriers, educational path orientations, attribution of occupational prestige, parental views, and career awareness (see Arulmani, 2009a, 2009b; Arulmani & Nag-Arulmani, 2005). This data has been used to develop and implement interventions designed for the Indian cultural and economic context (see Arulmani, 2010). The paper now draws upon WORCC-IRS data to discuss interest—a construct central to career psychology—to illustrate some of the principles of the cultural preparation process model.

Key Terms

Multiple Potentials Framework. Effective career guidance requires the coming together of multiple units of information: data about interests, aptitudes, and information

about the world of work. It is essential that it is possible to draw this information together if it is to contribute meaningfully to the process of career guidance and counselling. A commonly encountered difficulty, particularly in contexts where the scientific practice of career counselling is in its infancy, is that information is collected through tools and devices that are each based on different theoretical persuasions. While they may be independently useful, it would be difficult to reconcile such information into a consistent explanation of the individual's personal profile since each of these instruments originate from different theoretical frames of reference. Integration of information would be more effective if the various units of a career counselling system are undergirded by the same theoretical reference point.

The Multiple Potentials Framework (Arulmani & Nag-Arulmani, 2004) is an adaptation of Gardner's (1983) theory of multiple intelligences and is used by the author for the system of career guidance that he has developed (e.g., Arulmani, 2010). Within this system, assessment devices are based on five factors. The Linguistic theme (L) refers to using words attractively and effectively to communicate either in the written or spoken form. The Analytical-Logical theme (AL) refers to activities such as reasoning, planning, and calculating. The Spatial theme (S) is linked to designing, working with colours and shapes, drawing, and sketching. The Personal (P) theme refers to understanding people and human behaviour. The Physical-Mechanical theme (PM) refers to working with machines, engaging in physically demanding activities, and the application of mechanical reasoning (see Arulmani & Nag-Arulmani, 2004 and http://www.jivacareer.org/project/page/multiple-potentials-framework.html for a detailed description of the components of the multiple potentials framework).

Career interest and occupational preference. Interest is a construct that is central to career guidance and some of the most well-known and extensively used contemporary

methods of career guidance and counselling base themselves almost exclusively on understanding the individual's interest profile. *Career interest* as defined in this paper refers to the psychological construct, closely linked to a person's personality. Summarizing the history of interest assessment, Hansen (2005) describes career interests to be "a preference for activities expressed as likes or dislikes" (p. 281). Our definition of career interest is similar: Career interests are activities that draw a person's attention, things that a person is curious about, matters a person wants to pursue further, activities that a person considers worthwhile, and activities a person enjoys. Interest motivates and drives a person to preferentially seek out and engage with certain kinds of activities over others. Within this definition, career interests are patterns of likes, dislikes, and indifferences around specific themes and are directed toward certain kinds of *activities* rather than specific occupations. We define *occupational preference* as being distinct from career interests. Occupational preferences are reflected in the individual's attraction to a specific occupation. Therefore, when a person says she is interested in commercial art, she is expressing an occupational preference. On the other hand, if she says she is interested in a career that requires drawing, working with colours, designing, and visualisation, she is expressing career interests. Career guidance programmes assess career interests, and based on activities for which an individual shows preferences, points him/her toward occupations that are composed of such activities. It is assumed here that if an individual shows low interest for an area of activities, it is also likely that he/she will show low interest for careers that are linked to such activities. Students in the WORCC-IRS reported their occupational preference on a list of careers which each could further be assigned to one of the themes under the MPF. In this paper we analyse occupational preference ratings for architecture (assigned to the spatial theme) and students' career interest score for the spatial theme.

Prestige and value attribution. The respectability attributed to an occupation plays a powerful role in shaping interest directed toward that occupation, and people include or eliminate occupational alternatives based on their prestige attributes. Occupational prestige is the value attributed to a profession through social and cultural forces that grade occupations on a hierarchy of prestige.

Parental support and approval. This refers to the young person's perception of the extent to which his/her parents would support a given career choice. In the WORCC-IRS, researchers did not interact directly with parents. Instead data was collected on participants' perception of their parent's support, approval, and endorsement of career options.

In this paper, the career option of architecture is taken to illustrate the dynamic interactions between the variables under study. Students' occupational preference for architecture, their prestige ratings and parent approval ratings for this career option, and their career interests for spatial activities are examined. Career interest related to the spatial category are assumed to be closest to the occupation of architecture.

Method

Participants. Some of the most far-reaching educational decisions related to career preparation in India are made between the end of high school (Grade 10) and the end of the higher secondary school (Grade 12) (e.g., Arulmani & Nag-Arulmani, 2004). It is well established also, that socio-economic status has a defining impact on career development (e.g., Arulmani, Van Laar, & Easton, 2003). Hence, the WORCC-IRS followed a stratified random sampling procedure to select and survey boys and girls who were in Grade 10, Grade 12, vocational training courses and those who had not completed high school. The survey reached a total of 7,035 individuals from low, middle, and upper-middle social-economic status (SES) groups. Of these, 505 data sheets could not be used. The final sample

comprised 6,530 individuals from a total of 88 schools and vocational training institutes.

Table 1 presents the details of the sample.

Insert Table 1 about here

Tools.

Multiple Potentials Interest Inventory (MPII). Respondent's *career interests* were

assessed through the MPII. This is an interest inventory that taps the five factors of the

multiple potentials framework described above. It has been standardized for the Indian

context on a randomly drawn, stratified sample of 9,000 Indian adolescents and young adults

in the age range of 14 to 21 years. The MPII was constructed from an item pool of about 250

items per factor through a process of item and factor analysis. Items reflect occupational

tasks associated with a particular factor. For example, the item "transform thoughts and ideas

into words" is linked to the linguistic factor. Similarly, "use mathematical skills" is an

example of an item linked to the analytical-logical factor, "work with colours and designs" to

the spatial factor, "lead and organise people" to the personal factor, and "work with machines

and tools" to the physical-mechanical factor. Participants rate each item for how much they

would like to engage in it as a part of their work life. Response choices are anchored to 5

scale points where 1 indicates the lowest and 5, the highest level of interest. Positive,

statistically significant correlations ranging from .62 to .81 have been consistently obtained

between external criterion estimates and respondents' interest scores, across the five factors.

Tests of split-half reliability have shown high and significant Pearson's *r* ranging between .74

and .83 for all the factors (see Arulmani, 2005a for details).

The Career and Occupational Orientations Scale (COOS). This is a rating scale

wherein respondents are presented with a list of careers and firstly required to indicate their

interest level for each occupation across 5 response points where 0 carries the semantic label:

no interest and 5 indicates *very interested*. The interest level indicated by the participant is

taken as his/her level of *occupational preference*. Next, respondents are required to rate each occupation for the *prestige* that they attribute to it across 5 response points where 1 indicates *very low prestige* and 5 indicates *very high prestige*. Respondents then indicate their perception of *parent approval* across 5 response points where 1 indicates *low support* and 5 indicates *very high support*. During standardisation, positive, statistically significant correlations were obtained between external criterion estimates and respondents' COOS scores for each of the constructs rated: occupational preference: .81; prestige attribution: .75; perception of parent approval: .82. Similarly, test-retest reliability has shown a high and significant Pearson's *r* for each construct: occupational preference: .72; prestige attribution: .73; perception of parent approval: .84 (see Arulmani, 2005b).

Preparation. A panel of experts comprising senior scholars from the disciplines of psychology, psychiatry, education, statistics, anthropology, and sociology was formed to advice the project. Research partners were drawn from different regions of the country and were selected using the following criteria: fluency in English and the local language with past experience in English to local language translation; access to the sample; at least five years of experience related to student welfare work; interest/experience in career counselling; willingness to undergo an orientation to career psychology and be trained in the WORCC-IRS research methodology. The final team of 22 individuals was trained by experts including members of the advisory panel through a five day workshop. The tools, first developed and standardised in English, were translated by the research partners into their local languages (see Table 1), using a standardised method of translation-back translation into English-finalisation. Small pilot tests were conducted for each language and the necessary minor adjustments were made.

Results. Table 2 (top panel) shows that as occupational preference levels for architecture increase, mean scores for the spatial interest also increase. This conforms to the

theoretical expectation that those who are interested in architecture would also be interested in spatial activities. However, it must be noted that along with this trend, simultaneous increases in mean prestige attribution and parent approval scores are also seen. Members of this sample who have the lowest interest in architecture as a career also have low interest in activities related to the spatial factor, attribute low prestige to this profession, and have parents who show low approval for architecture as a career. An identical (reverse) pattern is seen for those who report high interest for architecture.

Insert Table 2 around here.

We next chose to examine two distinct subgroups (Table 2, bottom panel). First, about 25% of the respondents who rated architecture at the 0 (*lowest*) level of interest, recorded career interest scores (mean spatial score 84.44%.) that were higher than those who rated architecture at the 5 (*highest*) level of interest. Within this sub group it is seen that although their interest in spatial activities is high the pattern of their scores for the other variables is similar to those who obtained a *low* spatial interest score. That is, although this group records a high spatial interest score, their attribution of prestige to architecture and their parent's approval of architecture is low. Second, about 8% of the respondents rated architecture at the 5 (*highest*) level but recorded career interest scores (mean spatial score 37.05%) that were lower than those who accorded architecture the 0 (*lowest*) level of interest. Within this sub group, although interest in spatial activities is low, the pattern of their scores for the other variables being observed is similar to those who obtained a *high* spatial interest score. They attribute high prestige to architecture and they perceive their parents as being highly supportive of their wish to pursue architecture as a career. The extreme group analysis throws further light into the nature of relationship between parent approval, prestige and career interest on occupational preference.

In order to understand the strength of these relationships, we examined the correlations between occupational preference ratings for architecture, parent approval, prestige attributions, and career interest for spatial activities in the full sample. The sample's occupational preference for architecture showed positive associations with all three variables in our study (see Table 3). A strong positive association was seen with ratings of parent approval of architecture as a career option and prestige ratings for architecture. In addition, there is a strong association between parent approval and prestige ratings and a weaker association between career interest and these two culture/family and community variables. The association between occupational preference and individuals' career interest in spatial activities was moderate.

Insert Table 3 around here.

A further observation from this data is that merely 27 respondents (0.41% of the entire sample) rated occupational preference for architecture at the highest level of 5 *even though* they perceived parental support to be at the lowest level of 1. The finding that it was only a small group upon which parental approval did not have a strong influence, points again to the significance of cultural factors in the regions of the survey. In fact from this data it seems likely that only when prestige attribution and parental acceptance is high, there is concurrence between occupational and career interests.

Discussion. An often made observation in the day to day practice of career counselling is the lack of correspondence between an individual's stated occupational preference and his/her responses on a measure of career interest. A common example from the Indian context is the strong interest expressed by large numbers of students in medicine and engineering (e.g., Arulmani & Nag-Arulmani, 2005). Assessment of these students' interests for activities related to these occupations, more often than not, reveals a low correspondence between their occupational preference and career interests. For example, although high value

may be placed on the profession of medical doctor, a low value may be placed on some of the activities central to this profession: cleaning infected wounds, working for those who are in pain. Similarly, a high value may be placed on the profession of engineering, but a low value may be placed on some tasks that are key to this this profession: working with machines, applying mechanical reasoning. In other words, there may or may not be a concurrence between the value placed on a certain career and the value placed on activities related to that career, and without career guidance, a person may only realise this after he/she has entered the educational pathways into these professions. It has been argued in this paper that a wide range of social, cultural, and economic factors also influence the formation of both occupational and career interests and this brings us to the second point of this discussion.

The WORCC-IRS data presented in this paper could be used to support some of the propositions offered by the cultural preparation process model. The model proposes that global trends and locally occurring forces interact and through a process of cultural learning, a group develops a certain cultural preparation status equilibrium which defines the cultural preparedness of its members. Social organisation and value attribution are central aspects of the model. In an earlier analysis we reported that a significant proportion (86%) of the sample surveyed in the WORCC-IRS first turn to parents, followed by community members, for career advice and support (Arulmani, 2009a). It is, therefore, surmised that this sample falls closer to the collectivism side on the individualism-collectivism continuum. Drawing upon the proposition of social organisation, the model suggests that interest formation amongst individuals in a collectivistic group is likely to reflect the views and opinions of the collective. The data presented above points to the strong possibility that social and cultural factors such as parental support and approval lie at the heart of the formation and expression of interests. Further, it seems likely that value attribution in the form of prestige orientations toward occupations influence the formation of interests. Of particular importance is

relatively weaker association between career and occupational interest in comparison to parental approval and prestige attribution. These observations raise for our consideration the possibility that career development in the Indian context does not comprise a simple playing out of career interests. In support of the cultural preparation process model, it may be argued that the quality of cultural preparation of the members of this sample is such that interests (both occupational preferences and career interests) expressed by the individual are influenced by culturally mediated opinions that prevail in the group. Of importance to the practice of career counselling is the possibility that emerges as a result: The individual's indication of an occupational interest may or may not be connected to his/her expressed career interests. It is important, therefore, that models of career psychology take into account the many social, cultural, and economic forces that attend the process of career choice and development.

Conclusion

Reviews of the impact of career guidance and counselling in the West have generally shown positive effects (e.g., Kidd & Killeen, 1992; Oliver & Spokane 1988). However, other evidence shows that the effectiveness of career guidance and counselling is influenced by the extent to which models and the methods that arise from these models reflect the ways of life and world views of the community for which the programme is developed (e.g., Watson, 2010). It has repeatedly been shown, for example, that interventions that are transported from other contexts and implemented without accounting for contextual, cultural realties have poor outcomes (e.g., Arulmani & Abdulla, 2007; Duarte & Rossier, 2008; Reese & Vera, 2007). Yet, with the increasing demand for career guidance, services, methods of assessment and interventions are being implemented whose suitability for the Indian context is at best not known. As argued at the beginning of this paper, this can cause the transposition of definitions of career that are not indigenous to the local context, displacing already present,

culturally grounded orientations. WORCC-IRS data presented in this paper flags for our

attention the necessity of understanding the interactions between cultural factors and career

development. The time is well nigh for an Indian career psychology to take stronger roots

and break new ground in a context where career has not been indigenous. This may even

have to begin with a reconsideration of what career means in the Indian setting. Such efforts

could keep the following indicators in mind. Firstly, an effective model would provide a

clear indication of the nature of the impact of psychological, socio-cultural, socio-economic,

and educational factors on career development behaviour. This framework would guide the

development of devices (psychometric and qualitative) and the standardisation of intervention

techniques, including a system for categorising and updating careers information. An

effective intervention would necessarily be able to accommodate the demands imposed by

age, language, cultural difference, socio-economic status, special needs, and similar

variations. Secondly, such a model would provide a framework for delivering career

counselling services. Finally, an effective model of career counselling would describe the

parameters for the systematic training of individuals who provide career counselling services.

The cultural preparation process model is offered as a first step in that direction.

References

Arulmani, G. (2005a). *Development and validation of the Multiple Potentials Interest Inventory*. Bangalore, India: The Promise Foundation.

Arulmani, G. (2005b). *Development and validation of The Career and Occupational Orientations Scale (COOS)*. Bangalore, India: The Promise Foundation.

Arulmani, G. (2006). *Unpublished clinical records (2000 to 2006).* Bangalore, India: The Promise Foundation.

Arulmani, G. (2007). Counselling psychology in India: At the confluence of two traditions. *Applied Psychology: An International Review, 56*(1), 69-89.

Arulmani, G. (2009a). Career counselling: A mechanism to address the accumulation of disadvantage. *Australian Journal of Career Development, 19*(1), 7-12.

Arulmani, G. (2009b). The internationalisation of career counselling: Bridging cultural processes and labour market demands in India. *Asian Journal of Counselling, 16*(2), 149-170.

Arulmani, G. (2010). *The Jiva approach to career guidance and counselling: An Indian model* (Project Report). Bangalore, India: The Promise Foundation.

Arulmani, G. (2011). Striking the right note: The cultural preparedness approach to developing resonant career guidance programmes. *International Journal for Educational and Vocational Guidance, 11*(2), 79 - 93.

Arulmani, G. (in press). The cultural preparation process model and career development. In G. Arulmani, A. J. Bakshi, F. T. L. Leong, & A. G. Watts (Eds.), *Handbook of career development: International perspectives*. New York, USA: Springer International.

Arulmani, G., & Abdulla, A. (2007). Capturing the ripples: Addressing the sustainability of the impact of social marketing. *Social Marketing Quarterly, 13*(4), 84-107.

Arulmani, G., Bakshi, A. J., Leong F. T. L., & Watts, A. G. (in press). The manifestation of

career. In G. Arulmani., A. J. Bakshi., F. T. L. Leong, & A. G. Watts (Eds.), *Handbook of career development: International perspectives*. New York, USA: Springer International.

Arulmani, G., & Nag-Arulmani, S. (2005). *Work awareness and responses to career choices: Indian regional survey (WORCC-IRS)*. Bangalore, India: The Promise Foundation.

Arulmani, G., & Nag-Arulmani, S. (2004). *Career counselling: A handbook*. New Delhi, India: Tata McGraw-Hill.

Arulmani, G., Van Laar, D., & Easton, S. (2003). The Influence of career beliefs and socioeconomic status on the career decision-making of high school students in India. *International Journal for Educational and Vocational Guidance, 3*, 193-204.

Blustein, D. L. (1988). A canonical analysis of career choice crystallization and vocational maturity. *Journal of Counseling Psychology, 35*(3), 294-297.

Donkin, R. (2010). *The history of work*. London, UK: Palgrave Macmillan.

Duarte, M. E., & Rossier, J. (2008). Testing and assessment in an international context: Cross and multi-cultural issues. In J. A. Athanasou & R. V. Esbroeck (Eds.), *International Handbook of Career Guidance* (pp. 489-510). New York, NY: Springer.

Durkheim, E. (1984). *The division of labor in society*. London: UK: MacMillan. (Original work published 1893)

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York, NY: Basic Books.

Grusec, J. E., & Hastings, P. D. (2007). *Handbook of socialization: Theory and research*. New York, NY: Guilford Press.

Hansen, J. C. (2005). Assessment of interests. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work*. New Jersey, USA: John Wiley.

Hoebel, E. A. (1966). *Anthropology: The study of man*. New York , NY: McGraw-Hill.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, TX: Psychological Assessment Resources.

Kidd, J. M., & Killeen, J. (1992). Are the effects of careers guidance worth having? Changes in practice and outcomes. *Journal of Occupational and Organizational Psychology, 65*, 219-234.

Krumboltz, J. D. (1994). The Career Beliefs Inventory. *Journal of Counseling and Development, 72*(4), 424-428.

Lent, R. B. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*, 79-122.

Leong, F. T. L., & Pearce, M. (2011). Desiderata: Towards indigenous models of vocational psychology. *International Journal for Educational and Vocational Guidance, 11*(2), 65-77.

McMahon, M. (2005). Career counseling: Applying the systems theory framework of career development. *Journal of Employment Counseling, 42*(1), 29-38.

Merton, R. K. (1957). The role-set: Problems in sociological theory. *British Journal of Sociology, 8*, 106-120.

Oliver, L. W., & Spokane, A. R. (1988). Career-intervention outcome: What contributes to client gain? *Journal of Counseling Psychology, 35*(4), 447-462.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3-72.

Parsons, F. (1909). *Choosing a vocation*. Boston, MA: Houghton Mifflin.

Rauner, F. (2009). Differences in the organisation of apprenticeship in Europe: Findings of a comparative evaluation study. In F. Rauner, E. Smith, U. Hauschildt, & H. Zelloth (Eds.), *Innovative apprenticeships: Promoting successful school-to-work-transitions* (pp. 233-237). Berlin, Germany: LIT Verlag.

Reese, L. E., & Vera, E. M. (2007). Culturally relevant prevention: The scientific and practical considerations of community-based programs. *The Counseling Psychologist, 35*(6), 763-778.

Super, D. E. (1990). A life span, life-space approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (2nd ed.). San Francisco, CA: Jossey-Bass.

Thapar, R. (1966). *A history of India* (Vol. 1). New Delhi, India: Penguin Books.

Tilgher, A. (1930). *Homo faber: Work through the ages* (D. C. Fisher, Trans.). New York, NY: Harcourt Brace.

Tomasello, M. (2001). Cultural transmission. *Journal of Cross Cultural Psychology, 32*(2), 135-146.

Tomlinson, J. (1991). *Cultural imperialism: A critical introduction*. London, UK: Printer.

Triandis, H. C. (1995). *Individualism and collectivism*. Colorado, USA: Westview Press.

United Nations Department of Economicand Social Affairs. (2011). *World population prospects: The 2010 revision* (Volume II: Demographic Profiles, ST/ESA/SER.A/317). Retrieved from http://esa.un.org/wpp/Other-Information/faq.htm

van de Walle, G. (2008). Durkheim and socialization. *Durkheimian Studies, 14*(1), 35-58.

Watson, M. B. (2010). Transitioning contexts of career psychology in South Africa. *Asian Journal of Counselling, 16*(2), 133-148.

Xue, C. (2008). A review of Tomlinson's views on cultural globalization. *Asian Social Science, 4*(6), 112-114.

Table 1
An Overview of the Sample by Region (N = 6530)
Data presented as: Number (%)

Place	Number	Age in years			Class			Gender		School Type			Socioeconomic Status		
		13 to 15	16 to 18	>19	10	12	Voc.	M	F	Govt.	Pvt Aided	Pvt Unaided	Low	Middle	Upper Middle
Bangalore [1,2]	863	431	347	85	508	211	136	554	309	353	79	423	306	200	357
	(13.2)	(50)	(40.1)	(9.9)	(58.9)	(24.4)	(15.8)	(64.2)	(35.8)	(40.9)	(9.2)	(49)	(35.5)	(23.2)	(41.4)
Chennai [1,3]	629	194	417	18	208	212	209	354	275	172	277	180	156	236	237
	(9.6)	(30)	(66.3)	(2.9)	(33.1)	(33.7)	(33.2)	(56.3)	(43.7)	(27.3)	(44)	(28.6)	(24.8)	(37.5)	(37.7)
Dehradoon [1,4]	554	204	336	14	280	274	0	251	303	140	145	269	227	189	138
	(8.5)	(36.8)	(60.6)	(2.5)	(50.5)	(49.5)		(45.3)	(54.7)	(25.3)	(26.2)	(48.6)	(41)	(34.1)	(24.9)
Delhi [1,4]	490	263	225	2	391	99	0	162	328	337	0	153	110	91	289
	(7.5)	(53.7)	(45.9)	(.4)	(79.8)	(20.2)		(33.1)	(66.9)	(68.8)		(31.2)	(22.4)	(18.6)	(59)
Guwahati [1,5]	559	231	253	75	276	217	66	250	309	264	284	11	104	183	272
	(8.6)	(41.3)	(45.3)	(13.4)	(49.5)	(38.8)	(11.8)	(44.7)	(55.3)	(47.2)	(50.8)	(2)	(18.6)	(32.7)	(48.7)
Goa [1]	469	179	257	33	223	180	66	255	214	321	137	11	121	140	208
	(7.2)	(38.2)	(54.8)	(7)	(47.5)	(38.4)	(14.1)	(54.4)	(45.6)	(68.4)	(29.2)	(2.3)	(25.8)	(29.9)	(44.3)
Rampur [1,4]	421	161	216	44	210	140	0	206	215	281	34	35	118	138	165
	(6.4)	(38.2)	(51.3)	(10.5)	(49.9)	(33.3)		(48.9)	(51.1)	(66.7)	(8.1)	(8.3)	(28)	(32.48)	(39.2)
Shimoga [1,2]	558	177	297	84	210	206	142	347	211	211	275	72	215	60	283
	(8.5)	(31.7)	(53.2)	(15)	(37.6)	(36.9)	(25.4)	(62.2)	(37.8)	(37.8)	(49.3)	(12.9)	(38.5)	(10.8)	(50.7)
Srinagar [1,6]	327	67	179	81	140	99	88	224	103	190	136	1	141	86	100
	(5)	(20.5)	(54.7)	(24.8)	(42.8)	(30.3)	(26.9)	(68.5)	(31.5)	(58.1)	(41.6)	(.3)	(43.1)	(26.3)	(30.6)
Ukrul [1]	320	89	191	40	151	87	50	148	172	5	161	122	62	125	133
	(4.9)	(27.8)	(59.7)	(12.5)	(47.2)	(27.2)	(15.6)	(46.3)	(53.8)	(1.6)	(50.3)	(38.1)	(19.4)	(39.1)	(41.6)
Dhule [1,7]	559	123	297	139	142	104	313	414	145	138	418	3	177	163	219
	(8.5)	(22)	(53.1)	(24.9)	(25.4)	(18.6)	(56)	(74.1)	(25.9)	(24.7)	(74.8)	(.5)	(31.7)	(29.2)	(39.2)
Nagarkoil [1,3]	547	165	257	125	174	190	183	421	126	238	202	107	349	118	80
	(8.3)	(30.2)	(47)	(22.9)	(31.8)	(34.7)	(33.5)	(77)	(23)	(43.5)	(36.9)	(19.6)	(63.8)	(21.6)	(14.6)
Chandigarh [1,2]	234	106	123	5	159	75	0	123	111	195	0	39	73	112	49
	(3.5)	(45.3)	(52.6)	(2.1)	(67.9)	(31.1)		(52.6)	(47.4)	(83.3)		(16.7)	(31.2)	(47.9)	(20.9)
Full sample	6530	2390	3395	745	3072	2094	1253	3709	2821	2845	2148	1426	2159	1841	2530
	(100)	(36.6)	(52)	(11.4)	(47)	(32.1)	(19.2)	(56.8)	(43.2)	(43.6)	(32.9)	(21.8)	(33.1)	(28.2)	(38.7)

Note. In addition to English, the languages used in each location were: 1 = English, 2 = Kannada, 3 = Tamil, 4 = Hindi, 5 = Assamese, 6 = Urdu, 7 = Marathi. A small proportion of the sample (N=111) included those who had not completed high school.

Table 2

Mean Scores in Percentage for Occupational Preference, Career Interest, Career Awareness, Prestige Attribution and Parent Approval the Profession of Architecture (N = 6530)

Occupational Preference Level for Architecture	Career Interest (Spatial Activities) Mean (SD)	Prestige Attribution Mean (SD)	Parent Approval Mean (SD)
Groups based on Occupational preference			
0 (N = 185)	46.27 (31.78)	.32 (4.41)	.22 (2.94)
1 (N = 1693)	57.76 (20.78)	42.03 (26.08)	38.75 (25.42)
2 (N = 1139)	61.92 (18.58)	53.11 (20.97)	51.92 (22.57)
3 (N = 1346)	66.65 (17.61)	62.20 (20.23)	62.10 (22.41)
4 (N = 1172)	70.79 (17.60)	71.28 (20.69)	73.29 (22.04)
5 (N = 977)	74.72 (18.47)	84.83 (21.22)	85.69 (22.64)
Groups based on Occupational Preference and Career Interest			
Participants who rated architecture as 0 but had a > 75 spatial % score (N = 45)	84.44 (7.54)	1.33 (8.94)	.88 (5.96)
Participants who rated architecture as 5 but had a < 45 spatial % score (N = 80)	37.05 (7.58)	83.5 (22.29)	82.25 (24.31)

Note. Occupational Preference Ratings: 0 = No Interest, 1 = Low Interest, 2 = Somewhat Interested, 3 = Interested, 4 = Quite Interested, 5 = Very Interested.

Table 3

Correlations between Occupational Preference Ratings for Architecture, Parent Approval,
Prestige Attributions and Career Interest in Spatial Activities (N = 6530)

	Parent Approval	Prestige Attribution	Career Interest (Spatial Activities)
Occupational Preference Level (Interest in architecture as a career option)	.619[**]	.597[**]	.327[**]
Parent approval		.644[**]	.256[**]
Prestige Attribution			.235[**]

Note. All correlations are significant at the .001 level