Managing Inclusiveness and Diversity in Teams:
How Leader Inclusiveness Affects Performance through Status and Team Identity

Rebecca Mitchell
*University of Newcastle - Australia*

Brendan Boyle
*University of Newcastle - Australia*

Vicki Parker
*Hunter New England Local Health District, Australia*

Michelle Giles
*University of Newcastle - Australia*

Vico Chiang
*University of Hong Kong*

*See next page for additional authors*

Citation
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Abstract

While there is increasing pressure to work collaboratively in interprofessional teams, health professionals often continue to operate in uni-professional silos. Leader inclusiveness is directed towards encouraging and valuing the different viewpoints of diverse members within team interactions, and has significant potential to overcome barriers to interprofessional team performance. In order to better understand the influence of leader inclusiveness, we develop and investigate a model of its effect incorporating two mediated pathways. We predict that leader inclusiveness enhances interprofessional team performance through an increase in shared team identity and a reduction in perceived status differences, and we argue that the latter pathway is contingent on professional diversity. Data from 346 members of 75 teams support our model, with team identity and perceived status differences mediating a significant effect of leader inclusiveness on performance. In addition, we found support for the moderating role of professional diversity. The results reinforce the critical role of leader inclusiveness in diverse teams, particularly interprofessional teams, and suggest that social identity and perceived status differences are critical factors mediating its impact on performance.

Keywords: Professional Diversity, Healthcare Management, Team Dynamics, Leadership.
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Interprofessional teams comprise members of different healthcare professions collaborating on service delivery and decision-making (CCMHI, 2006), and have been the focus of significant organizational investment (Arndt & Burke, 2009; CHSRF, 2008; Curran et al., 2009). However, while such teams can be beneficial at a patient, staff and organizational level (Mowday, Steers, & Porter, 1979; Reese & Sontag, 2001), a number of studies suggest that they do not necessarily perform effectively, and may experience friction, hostility, and poor performance (Atwal & Caldwell, 2005; Caldwell & Atwal, 2003).

A core characteristic of interprofessional teams, their diverse professional composition, has been identified as a potential source of conflict and a factor explaining poor performance (Hall, 2005; Hudson, 2002). Conversely, such diversity has also been identified as an important contributor to effectiveness through the knowledge-related advantages associated with professional expertise (Mitchell, Parker, & Giles, 2011). These ambiguous results are typical of research into diverse teams (van Knippenberg & Schippers, 2007), however, the nature of professions suggests that some factors may be particularly relevant to the success of interprofessional teams (Mitchell, Burgess, & Waterhouse, 2010).

Professions are differentiated from other occupations by distinctive conventions and institutions that are sustained by discrete ideologies of expertise and service (Dimaggio & Powell, 1983). Past research supports the role of significant normative and cognitive influences in promoting and restraining collaboration across professional boundaries (Currie & Suhomlinova, 2006). There is evidence that health care professionals tend to operate in uni-professional silos and that sharing knowledge across professional borders is problematic (Ferlie, Fitzgerald, Wood, & Hawkins, 2005). This research suggests that there are significant
professionally-based factors promoting and restraining interprofessional collaboration (Currie & Suhomlinova, 2006) and has led to a gradual increase in research focused on interprofessional teamwork over the past three decades (Burke et al., 2006; Stewart, 2006). An area of emerging value in this work is leadership and the influence of leaders in interprofessional team performance (Mathieu, Maynard, Rapp, & Gilson, 2008).

We contribute to this important research in the leadership of interprofessional teams by investigating the role of leader inclusiveness. Leader inclusiveness reflects behavior that encourages an appreciation for the disparate and diverse contributions of all members, particularly in situations in which their input might not typically be attended to (Nembhard & Edmondson, 2006). While research into inclusion is still in its infancy, it has recently been discussed as a key theoretical determinant of performance in groups, particularly diverse groups (Carmeli, Reiter-Palmon, & Ziv, 2010; Shore et al., 2010).

The current study integrates our extant knowledge of team diversity and leader inclusiveness into a research framework that is informed by literature on the professions. We develop a model of leadership and interprofessional team performance through two mediated pathways, which depict the effect of team identity and perceived status differences between members. Leader inclusiveness is argued to enhance team identity, defined as shared attachment to the team (Shapiro, Furst, Spreitzer, & Von Glinow, 2002), by enhancing collaboration through the perception of shared goals (Tope & Thomas, 2007). Leader inclusiveness also decreases members perception of status differences, differences in terms of the respect and influence accorded on the basis of profession, (Anderson, John, Keltner, & Kring, 2001), by convincing followers that their different perspectives and ideas are genuinely respected and appreciated (Carmeli et al., 2010; Hirak, Peng, Carmeli, & Schaubroeck, 2012). This increases performance by promoting knowledge sharing and open discussion of different perspectives. Given previous support for the impact of professionally-
based hierarchies in healthcare teams, we argue that this mediated pathway is contingent on professional diversity, defined as variety in the professional composition (Harrison & Klein, 2007; Mitchell et al., 2011).

This study seeks to contribute to current research in a number of areas. First, we respond to calls to investigate the role of leadership in diverse work teams, particularly interprofessional teams (Kearney & Gebert, 2009). There is substantial evidence that team leadership is an important factor in determining dynamics and performance (Chi, Chung, & Tsai, 2011; Sauer, 2011); with argument that a team’s leader can ‘make or break’ their performance success (Druskat & Kayes, 2000). Yet, the role of leadership in diverse teams remains underexplored (Kearney & Gebert, 2009). Leader inclusiveness has been identified as an important managerial tool consequent to its unique focus on the development of an open and safe team dynamic (Carmeli et al., 2010), yet this is one of very few studies to explore its role in diverse teams and one of the first to incorporate complex pathways explaining its effect in interprofessional teams. By investigating the mediating role of team identity we reinforce the potential for leader inclusiveness to bridge professional divides through a relatively malleable aspect of social identification. This is an important contribution given the potential motivating impact of social identity and its relevance to professions (Ellemers, de Gilder, & Haslam, 2004). We build on previous research that has investigated the role of team identity in demographically, but not professionally, diverse teams (Hogg, van Knippenberg, & Rast, 2012) and contribute to an important body of research on the role of social identity in effective leadership, and the role of leadership in diverse teams (Kearney & Gebert, 2009).

A further contribution of this study stems from its focus on status inequality as an mediating variable in the leadership-performance relationship. By investigating the mediating role of perceived status differences in interprofessional teams, we highlight the importance of
addressing the well-entrenched status hierarchy that exists in healthcare organizations (Dingwall & Lewis, 1983). This is one of the first studies to investigate the role of leadership in addressing these potentially dysfunctional dynamics which can damage interpersonal relationships, constrain progress towards team goals, and likely account for the negative findings of past studies into healthcare collaboration (van Knippenberg, De Dreu, & Homan, 2004). This is also one of the first studies to investigate professional diversity as a moderating variable, and highlights the capacity of team composition to account for the varying effects of leadership and team dynamics on performance. This is a significant contribution as it defines the circumstances under which the effect of reducing perceived status differences influences team performance.

Theoretical Background

Professional Diversity

Following from previous research, we conceptualise diversity in terms of variety in professional composition. Professional diversity, conceptualised as variety, reflects the extent or degree to which group members differ in their professional background (Harrison & Klein, 2007). From this perspective team composition may reflect homogeneity in which all members are of the same profession through a moderately heterogeneous team in which some members’ professions differ from others, to a highly diverse team in which all members are of a different profession. The assumptions underpinning this conceptualisation of professional diversity as variety are that, within teams, members may differ from one another in terms of their profession; teams differ in the extent to which members are evenly spread across professions; and that differences between teams in the extent of professional diversity will be associated with particular consequences (Harrison & Klein, 2007).

Reviews of diversity research have identified two main analytical approaches to explaining its impact (van Knippenberg et al., 2004; Williams & O'Reilly, 1998). These
perspectives have been applied to demographic and job-related diversity, including interprofessional teams (Mitchell, Burgess, et al., 2010). The information/decision-making perspective suggests that diversity is a proxy for knowledge differences and holds that it provides teams with the knowledge assets to enable more comprehensive analysis, and informed and innovative solutions, consequent to the integration of different perspectives (Ancona & Caldwell, 1992; DeDreu & West, 2001). Diversity is also argued to impact team dynamics and outcomes negatively, through the processes of social identification and categorisation (Ashforth & Mael, 1989; Tajfel & Turner, 1986). This social identity perspective suggests that the perception of similarities and dissimilarities between members provides a basis for social categorisation, the process of dividing different individuals into distinct groups that are represented as prototypical sets of attributes, which are held to characterise one group and differentiate it from another (Hornsey, 2008). Following from the theory of intergroup bias, this process of social categorisation leads members within a social group, termed the ‘ingroup’, to share trusting and positive relationships while members of other social groups, often labelled the ‘outgroup’, are alienated and vilified (Tajfel, 1982; Williams & O'Reilly, 1998).

The information/decision-making, social identity, and integrated categorisation elaboration model have been applied to professional-diversity and interprofessional teams (Mitchell et al., 2011). Profession has been shown to provide a sufficient and likely basis for social categorisation (Pietro, Shyavitz, Smith, & Auerbach, 2000), and professionally-based attributions are frequently used to explain differences in expertise between employees in healthcare settings (Hornsey, 2008). Their application suggests that positive team outcomes will be linked to the utilisation of diverse knowledge and skills on which team members can draw (Williams & O'Reilly, 1998), and that negative team outcomes may emerge consequent to process of social categorisation and interactions characterised by conflict and information
withholding (Jehn, Northcraft, & Neale, 1999). Given the potential for diversity to engender positive and negative outcomes, the identification of factors capable of enhancing the positive outcomes of diversity, while minimising negative effects associated with stereotyping and bias, is therefore critical to the effective leadership of diverse teams (van Knippenberg & Schippers, 2007).

We argue that leader inclusiveness potentially enhances positive team outcomes by influencing social identification processes to promote collaboration and minimise circumstances that arouse intergroup hostility.

**Leader inclusiveness**

Leader inclusiveness encompasses behaviors that promote the inclusion of all team members in discussions and decisions, and in which their divergent perspectives are explicitly valued and encouraged (Nembhard & Edmondson, 2006). It is an important relational leadership style (Shore et al., 2010) and is related to participative leadership, which involves consultation with followers and the use of shared decision-making mechanisms, as well as some aspects of transformational leadership. Leader inclusiveness is differentiated from these constructs by its explicit focus on situations that are characterized by status or power differences and its attention to behaviors that acknowledge the value of diversity in others’ views (Nembhard & Edmondson, 2006). Leader inclusiveness differs from participative leadership, as it reflects behaviors specifically directed towards valuing the different, often conflicting, viewpoints and ideas of all members’ within team interactions when their views may otherwise be disregarded (Nembhard & Edmondson, 2006). Leader inclusiveness also differs from transformational leadership, in that, while transformational leaders challenge existing assumptions and stimulate new ideas, as well as providing personal encouragement and support (Bass 1985, 1998), inclusive leaders focuses on a specific strategy of openness and accessibility to create a dynamic that promotes a diversity of
opinions in the context of collective team goals. Leader inclusiveness has been established as a critical leadership behavior in teams (Carmeli et al., 2010), and is particularly relevant in diverse teams (Nishii & Mayer, 2009), however the mechanisms explaining its impact have yet to be fully explored.

The following discussion submits our rationale underlying the proposed relationships and links reduced status differences to performance, arguing that this effect is contingent on professional diversity. The subsequent section discusses how leader inclusiveness is linked to team identity, which provides a contrasting mediated pathway to performance.

**Model Development and Hypotheses**

Perceived status differences are usually accorded on the basis of job-related or biodemographic characteristics (Anderson, John, Keltner & Kring, 2001). Status is frequently accorded on the basis of profession and is often associated with rewards and authority (Bacharach et al, 1993), with the existence of professionally-based status hierarchies well-established in healthcare (Friedson, 1970; Dingwall, 1974). Interprofessional teams, comprised of different professions, are therefore likely to constitute settings in which these status hierarchies are enacted (Nembhard & Edmondson, 2006).

Leader inclusiveness is argued to lessen perceived status differences by explicitly valuing professional distinctiveness and professionally-based contributions to the team’s task (Carmeli et al., 2010; Hirak et al., 2012). In interprofessional teams, this leads members from different professions to believe that their individual contributions towards the team’s work goals will be valued (Nembhard & Edmondson, 2006). Previous research links perceived inclusion of the self in a team to member perception that their contribution to the team is recognised as uniquely significant (Ellemers, Sleebos, Stam, & Gilder, 2011).

Past studies suggest that higher status members frequently dominate healthcare team discussions, and lower status members are often excluded from decision-making (Berger,
Cohen, & Elditch, 1972; Gair & Hartery, 2001; Thylefors, 2012). In interprofessional teams, higher status members, such as medical practitioners (Hafferty & Light, 1995) are therefore likely to dominate discussions over lower status members, such as nurses or allied health professionals (Freidson, 2006). As leaders promote the acceptance and value of divergent positions, including the views of lower status members, they acknowledge individual members as discrete sources of expertise (Cox, Lobel, & McLeod, 1991; Nembhard & Edmondson, 2006) and reduce the perception that some professional contributions will be respected over others. While previous research has not investigated the direct link between leader inclusiveness and perceived status differences, previous research indicates that such leader behaviour signals that profession is not an important determinant of which contributions are attended to over others. In this context, the contribution of medical professionals, typically perceived as team ‘captains’ in healthcare (Fuchs, 1974), is viewed as of equal value as input provided from members of other professions. This leads to the following hypothesis:

_Hypothesis 1: Leader inclusiveness will be inversely linked to perceived status differences in interprofessional teams._

Perceived differences in status have been shown to lead to a significant reduction in collaborative behavior (Kirchler & Davis, 1986; Pagliari & Grimshaw, 2002) and undermine successful teamwork (Nembhard & Edmondson, 2006). Team members have been shown to focus on conflict management and dealing with the perceived threat at the expense of their team’s task (Amason, 1996; Jehn et al., 1999). Reducing perceived status differences in interprofessional teams is therefore argued to reduce the negative affect and hostility that emerges as part of member’s defence of their different professional positions. A belief by members of such teams that each person’s expertise and input is equally valuable acts to reduce the risks associated with perceived incompatibilities between professions and
associated pressure to accommodate conflicting positions within their professionally-based perspective (Ellemers et al., 2011).

A reduction in perceived status differences also lessens the risk that the ideas of lower status professions will not be openly considered, and increases motivation to share and debate alternative positions (Tyler & Blader, 2003). As team members become more focused on the positive aspects of sharing knowledge across professional boundaries, there is likely to be less conflict surrounding professional values and perspectives, and less perceived risk that professional expertise is undervalued. Members from different professions are therefore more likely to share their ideas, openly consider others’ suggestions and participate in the development of solutions that integrate knowledge from a range of professional areas (Barreto, Spears, Ellemers, & Shahinper, 2003; Mitchell, Parker, & Giles, 2012; Tjosvold & Sun, 2003). This leads to the following hypothesis:

_Hypothesis 2: A reduction in perceived differences in professionally-based status will be significantly related to an increase in performance in interprofessional teams._

While a reduction in perceived status differences is argued to demonstrate a positive relationship with team performance, this is likely to be dependent on the extent to which the team is professionally-diverse. In more homogeneous teams, a reduction in professionally-based status differences may lessen hostility and conflict, however this effect may not be sufficient to trigger a positive performance outcome as more homogeneous teams are less likely to encompass significant status differentials (Thylefors, 2012). Conversely, in a more professionally-diverse team there is an increased likelihood that professionally-based status differences will influence team dynamics (Schmader, Johns, & Forbes, 2008). This is because professionally-diverse teams constitute settings in which status differences are likely to become more apparent due to the awareness of profession as a salient social category (Wilson-Evered, Härtel, & Neale, 2001). When profession is a salient social category, team
members are more attuned to distinctions between professions and divergence in the positions and status of other professions (Randel, 2002; Wegge & Haslam, 2003). When members perceive substantial differentiation in prominence between their respective professions, this provokes conflict and action to defend professional reputation from lower status individuals, both of which lead to poor performance (Williams & O'Reilly, 1998). In this context, a reduction in perceived status differences is likely to enhance performance outcomes to a greater extent than in less professionally-diverse groups.

_Hypothesis 3: Professional diversity will moderate the relationship between a reduction in perceived status difference and performance. This moderating effect will be such that a reduction in perceived status differences will lead to a greater increase in performance when teams are more professionally-diverse, and a lesser increase when teams are less diverse._

We have argued that a reduction in perceived status differences mediates the positive relationship between inclusive leadership and performance, and that the path between the mediator and performance in moderated by professional diversity. Together these hypotheses suggest the following moderated mediation:

_Hypothesis 4: Professional diversity will moderate the mediated relationship between inclusive leadership and performance. This moderating effect will be such that the mediated effect of inclusive leadership will lead to a greater increase in performance when teams are more professionally-diverse than when teams are less diverse._

In addition to lessening perceived status differences, we argue that inclusive leaders also enhance interprofessional team performance by building team identification. By assuring members that their individual contribution is valued, inclusive leaders facilitate the development of team belonging, the existence of strong, stable team relationships (Baumeister & Leary, 1995). Under such circumstances, members are more likely to perceive
themselves as important participants in the group’s work and start thinking of their contribution to collective group goals (Wang, Law, Hackett, Wang, & Chen, 2005). Perceived inclusion means that individuals see themselves as a full member of the team, engaged psychologically and behaviorally (Branscombe, Spears, Ellemers, & Doosje, 2002; Ellemers et al., 2011; Leach et al., 2008; Tyler & Blader, 2003). Feeling included also provides a cognitive connection between the member and team (Hertel, Konradt, & Orlikowski, 2004) and this connection has been linked to increased team identification (Sleebos, Ellemers, & de Gilder, 2006).

Strong social identification is also linked to the perception that membership will allow the fulfilment of the need to belong and desire to be appreciated as a unique individual (Pickett, Bonner, & Coleman, 2002). As inclusive leaders treat individuals as part of a valued ‘ingroup’, and also as appreciated for their diverse knowledge and perspective, members sense of belonging is not compromised by having to conform to a dominant single position or idea (Shore et al., 2010). Inclusive leaders also increase members’ perception of intra-team connections, which diminishes the likelihood that individuals will dislike and distrust other members consequent to professional diversity, as predicted by the theory of similarity-attraction (Byrne, 1971; Sethi, Smith, & Park, 2001). Similarity–attraction theory holds that perceived similarity on attributes such as attitudes and values will engender interpersonal attraction and affiliation (Byrne, 1971; Newcomb, 1968). In studies of diverse team composition, consistent support has been found for a link between perception of similarity, and affiliation and attraction (Mannix & Neale, 2005). In this case, inclusive leaders increase perception of similarity between members and, through this, increase the extent of intra-team liking, attraction and connectedness (Mitchell, Parker, Giles, Joyce, & Chiang, 2012). Past studies also show that perception of similarity leads members to rate each other as sharing positive attributes (Barsade, Ward, Turner, & Sonnenfeld, 2000; Mannix & Neale, 2005). The
promotion of interdependence and intra-team connections has, in turn, been connected to the development of team identity (Ellemers et al., 2011; Gaertner, Mann, Murrell, & Dovidio, 1989; Homan et al., 2008).

This leads to the following hypothesis:

_Hypothesis 5: Leader inclusiveness will have a positive relationship with team identity._

In interprofessional teams, the development of a common team identity reduces the tendency for members of one profession to perceive members of other professions as part of the ‘outgroup’ (Mitchell, Parker, Giles, & White, 2010). By perceiving themselves and others within a common social category, members become more accepting of the diverse goals and approaches of other professions (Liden, Erdogan, Wayne, & Sparrowe, 2006). Previous research provides consistent support for the role of team identity in extending attributes such as integrity, trustworthiness and supportiveness to traditional ‘outgroup’ members (Ashforth & Mael, 1989; van Dick, van Knippenberg, Hagele, Guillaume, & Brodbeck, 2008). When individuals perceive other team members as part of a common ‘ingroup’ they are more likely to engage in collaborative discussion and information-sharing, and consider the alternative, even opposing, suggestions of other professions from an openminded perspective (Avolio & Bass, 2004). In this context, members are also motivated to challenge and debate alternative positions, and justify, and seek justification for, conflicting ideas (Burningham & West, 1995; Pearce & Gregersen, 1991).

Evidence also indicates that team identity influences team member motivation to engage in thorough evaluation of others’ positions and propositions (Gaertner et al., 1989; van Knippenberg, 1999). Individuals are more likely to engage in comprehensive analyse and deliberate ‘ingroup’ positions when compared to those of the ‘outgroup’ (van Knippenberg, 1999). By extending the ‘ingroup’ category beyond traditional ‘outgroup’ boundaries, team
identity increases the likelihood of a more systematic and analytical evaluation of the diverse perspectives presented by different professions (Becker, 2005).

Team identification has also been found to increase group cohesion and participation, and has been found to increase task efficiency (Michinov, Michinov, & Toczek-Capelle, 2004; Ren, Kraut, & Kiesler, 2007). Common identity increases commitment to the team, which in turn leads members to work harder, contribute more and not engage in social loafing. In addition, team identification and the consequent categorisation of team members as part of the ‘in-group’ leads to feelings of greater closeness and responsibility for the welfare of these members (Dovidio, Piliavin, Gaertner, Schroeder, & Clark III, 1991). This increases the likelihood that team members will engage in helping behaviour (Levine, Prosser, Evans, & Reicher, 2005), are argued to be more likely to with other members collaboratively to achieve the teams goals. Common bond theory also suggests that, as other team members viewed as part of the ‘ingroup’ and therefore more similar and attractive (Byrne, 1971), team identity increases the likelihood that members feel positive connections to each other as individuals (Hogg & Turner, 1985). These interpersonal ties increase knowledge sharing and collaboration, reduce hostility and conflict (Ren et al., 2007).

In summary, sharing a common team identity enhances the likelihood that members will engage in information-sharing and collaborative interaction, and that they will constructively analyse the alternative positions presented by other members. These behaviors have been linked to team performance (DeDreu & West, 2001; Gelfand, Erez, & Aycan, 2007; Miller, Burke, & Glick, 1998). In addition, the thorough analysis of a range of positions promotes the adoption of superior over lesser choices (Becker, 2005) and prioritises high quality over inferior arguments (Gaertner et al., 1989), which, in turn, enhances team effectiveness.

This leads to the following hypotheses:
Hypothesis 6: Team identity will be positively related to performance in interprofessional teams.

We have argued that leader inclusiveness enhances team identity and that team identity, in turn, enhances performance. In combination, these arguments suggest a final hypothesis:

Hypothesis 7: Team identity will mediate the positive relationship between leader inclusiveness and performance in interprofessional teams.

Method

Procedure and Sample

The target population for this study was health care teams working in tertiary-referral acute care hospitals in Australia. Data was collected as part of a large study on interprofessional team effectiveness, during a 12 month period over 2009-2010. A work team was defined as incorporating at least two team members and a team leader who undertook interdependent activities towards the achievement of shared team outcomes (Kozlowski & Bell, 2003). We included teams that were identified as such by both members and leaders. Invitations to participate were sent to a random sample of 210 teams held within a central practice-development database. Responses were received from 346 members and leaders of 75 teams, representing a 36% response rate. Teams were employed in a broad range of areas including direct patient care, research, education, policy development, clinical management, service management and governance.

The mean number of professions represented in groups was 4 with a range of different healthcare profession categories represented including: Nurse, Dietician, Physiotherapist, Social Worker, Medical Practitioner, Pharmacist, Occupational Therapist, Speech Pathologist, Radiographer and Psychologist. Teams had been together for an average of approximately two years and were intact when the survey was completed. Team leaders came
from a range of professions including nursing, medicine, physiotherapy, physiotherapy and social work.

In order to investigate sample representativeness, we compared specific attributes of our sample with known population values. We used data at health care data at national and regional level for comparison (AIHW, 2006). For our study sample, the average age of 41.8 years was close to the average age for healthcare professionals at a national (42 years) and regional (43 years) level. The distribution of healthcare professions was similarly represented in our study to the national and regional level. Nurses represented 54% of the study sample, and comprise 51.4% of healthcare professionals employed nationally and 54% regionally. Medical practitioners represented 13.8% of the study sample, and comprise 13.7% of healthcare professionals employed nationally and 14.6% regionally. Allied health professionals comprised 23.6% of the study sample, and represent 22% of healthcare professionals employed nationally and 25.38% regionally. This provides some support for the representativeness of our sample.

We received an average of 4.6 responses per team. The total number of responses equates to an average of 52% per team. Dawson’s (2003) selection rate was used to evaluate low group-level response rates. Dawson’s (2003) formula can be used to assess the accuracy of incomplete group data in predicting true scores as a function of number of responses per group (n) and group size (N) using the formula ([N – n]/Nn) (Dawson, 2003). Following prior research we chose a selection rate cut-off point of .32 (Richter, West, Van Dick, & Dawson, 2006), which is generally correlated with true scores at .95 or higher (Dawson, 2003). No groups were excluded as all groups met this cut-off point.

Two different questionnaires were used to collect data. Data on dependent variables were collected from the team leader, and data on independent variables were collected from team members. This approach lessened the risk of bias associated with collecting data on
independent and dependent variables from the same source (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

**Measures**

All items were measured on a 7-point Likert scale. For hypotheses testing, the level of analysis was the team. Following similar recent research (Schaubroeck, Lam, & Cha, 2007), we employed two intraclass correlation coefficients to assess whether aggregation of measures to group level was justified (Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004). ICC(1) indicates the extent of agreement in ratings from members of the same team and ICC(2) indicates whether teams are able to be differentiated on the basis of the variable under consideration. The ICC(1) result for all variables was significant and over the median of .12 reported by James (1982). We also used inter-rater agreement to justify aggregation, with all mean rwg values over the acceptable .70 cutoff (George, 1990).

**Independent Variable: Leader Inclusiveness** was measured using four items adapted from previously validated scales (Nembhard & Edmondson, 2006; Shortell, Rousseau, Gillies, Devers, & Simons, 1991), for example, respondents were asked to indicate their agreement with the statement: “Our leadership encourages the input of members from all professions.” The alpha coefficient for this measure was .96, ICC(1) was .29, F(74, 270) = 2.99, p=.00, indicating that team membership accounted for a considerable and significant component of the variance in responses (Bliese, 2000; Snijders & Bosker, 1999), and the ICC(2) was .65. The rwg for leader inclusiveness was .72.

**Mediators: Perceived Status Differences:** Four scale items were used to measure perceived status differences taken from previous research, for example, respondents were asked to indicate their agreement with the statement: “There are status differences between professionals in the team”. (Katz-Navon & Erez, 2005; Milliken, Bartel, & Kurtzberg, 2003). The ICC(1) for this measure was .37, F(74, 270) = 3.27, p=.00 and ICC(2) .73. The rwg for
perceived status differences was .79. **Team Identity:** A three-item scale was used to assess team identity adapted from past research (Van Der Vegt & Bunderson, 2005), and asked, for example, whether members “identify strongly with the team?” The alpha coefficient for this measure was 0.85, ICC(1) was .16, F(74, 270) = 2.02, p=.01 and ICC(2) .46. The ICC(1) result for team identity was over the median of .12 reported by James (1982). The ICC(2) result was comparable to similar studies (Sosik, Kahai, & Avolio, 1998; Walker, Smither, & Waldman, 2008), but was lower than expected. The rwg value of .74 provided additional justification for aggregation.

**Moderator: Professional Diversity:** To assess team diversity, respondent leaders were asked to indicate the number of different professions represented on the team. Diversity was measured using Blau’s (1977) index of heterogeneity: \(1-\sum Pi^2\), where Pi is the proportion of members in \(i\)th category. Blau’s (1977) index has wide-spread usage as a measure of group diversity (Kilduff, Angelmar, & Mehra, 2000; Pelled, Eisenhardt, & Xin, 1999). A higher score on Blau’s index indicates greater professional diversity.

**Dependent Variable: Team Performance** was measured using four items tapping team effectiveness. Leader perception of effectiveness follows past research which incorporates a focus on goal attainment and work quality (Langfred, 2000; Mathieu et al., 2008), measured with items such as “How effective is this team?”. The alpha coefficient for this measure was 0.94. **Control Variables:** Following previous research, we controlled for team size (Hobman & Bordia, 2006; Tushman & Nadler, 1978). **Team Size:** was assessed by asking respondent leaders to indicate the number of team members. **Team Tenure** was assessed by asked leaders to indicate the length of time members had been working together as a team.

**Analysis and Results**
Table 1 shows the means, standards deviations, square root of average variance extracted (AVE) and composite scale reliability for each variable, and correlations among variables.

This study employed partial least squares (PLS) structural equation modelling (SEM) to analyse data. PLS is a second generation modelling technique is increasingly utilised in organisational studies research (Sosik, Kahai, & Piovoso, 2009). We used SmartPLS version 2.0 software to undertake this analysis (Ringle, Wende, & Will, 2005). Many published studies in management research utilise PLS including, for example, research in group dynamics (Peng & Luo, 2000; Shanxing, Kai, & Jianjun, 2008), leadership (Acquaah, 2007; Howell & Avolio, 1993; Li, Poppo, & Zhou, 2008; Li & Zhou; Li, Zhou, & Shao, 2009; Sosik, 1997); strategic management (Julie Juan, 2005), innovation (Peng, 2001) and work-family conflict (Peng, 2003).

PLS was chosen for this data analysis as it has some significant advantages over other modelling techniques. Of particular relevance for this study, PLS SEM can be used effectively in the initial stages of theory development and can be used to analyse data from small samples, ranging from 30 observations (Sosik et al., 2009). A recent Monte Carlo simulation indicated that a six-variable model with a sample size of 17 produced estimates with low probability of Type-I error and adequate power (Luo & Peng, 1999).

Similar to other structural equation modelling techniques, PLS SEM analysis generates data that enables the assessment of the measurement component and structural component of research models. For the measurement model, PLS analysis provides factor loadings that can be interpreted similarly to principal components factor analysis (Bookstein, 1986). Table 2 provides the factor coefficients for each of the study constructs.
Inspection of the data in Table 2 reveals that all coefficients are greater than .7. All scale items display the highest coefficients with their parent scale. This support claims of discriminant validity as it indicates conceptual homogeneity within scales and heterogeneity between scales (Thompson, 1997). Discriminant validity was also evidenced by the square root of the average variance extracted (AVE) which was higher, for each construct, than its correlations with other variables, as shown in Table 1 (Fornell & Larcker, 1981).

PLS provides parameter estimates that enable assessment of the structural component of the research model. Bootstrapping was used to generate t-test statistics in order to evaluate the statistical significance of the path coefficients. Bootstrapping involves generating a large number of random samples by sampling with replacement from the original data (Sosik et al., 2009). Following Chin (1998), we ran 1000 bootstrap samples.

Figure 1 depicts the results of partial least squares analysis. The partial least squares analysis revealed a significant negative path coefficient for the impact of leader inclusiveness on perceived status differences ($\beta=-.79$, $t=16.69$, $p<.00$) supporting hypothesis 1. Analysis showed a path coefficient for perceived status differences regressed on team performance that was not significant ($\beta=-.20$, $t=1.39$, $p=.17$) indicating no support for hypothesis 2. No evidence was found for a direct relationship between leader inclusiveness and performance ($\beta=.05$, $t=0.26$, $p=.80$)

To test hypotheses 3, a standardised cross-product interaction construct was computed and included in the model as suggested for PLS analysis (Chin, Marcolin, & Newsted, 2003). The results show that professional diversity moderated the impact of perceived status
differences on performance as predicted. The partial least squares analysis revealed a significant path coefficient for the interaction variable regressed on performance ($\beta=-.26$, t=2.90, p=.01).

In order to explore the nature of the moderating effect further, we used simple slopes computations and graphed the interactions using high (1SD above the mean) and low (1SD below the mean) levels of the moderator. These analyses revealed that perceived status differences were significantly and negatively associated with performance when professional diversity was high (simple slope=-.72, t=-2.13, p=.04) and was negatively, but not significantly, related performance when professional diversity was at a low level (simple slope=1, t=-.29, p=.77), as depicted in Figure 2. These results provide support for hypothesis 3 by indicating that decreases in perceived status differences are linked to increases in performance only when professional diversity is high. Hypothesis 4 posited that the indirect effect of leader inclusiveness on performance via perceived status differences depends on professional diversity levels. To test moderated mediation, the data was investigated to assess whether the strength of the mediation via status differences differs across levels of the moderator, professional diversity (Preacher, Rucker, & Hayes, 2007). To investigate this effect, an extension of the Johnson-Neyman technique to moderated mediation was applied (Preacher et al., 2007). This technique involves testing the significance of the indirect effect of leader inclusiveness at a range of values of professional salience until the value is found for which the indirect effect becomes significant ($\alpha = 0.05$). The results of this analysis show that at professional diversity values above 0.7, the mediating effect of perceived status differences is significant. At professional salience levels of 0.7 and above, the mediating role of perceived status differences is significant and becomes stronger. Below this level of professional salience, the mediating effect of team identity weakens and is not significant. This analysis supports hypothesis 4. To further confirm this hypothesis we generated a
bootstrap-based bias corrected confidence interval for the specific indirect effect at a professional diversity value of 0.7. The 95% confidence interval did not include zero (95% CI .03-.89), supporting our moderated mediation hypothesis.

The partial least squares analysis revealed a significant positive path coefficient for the impact of leader inclusiveness on team identity (β=.72, t=13.17, p<.00) supporting hypothesis 5, and a significant path coefficient for team identity regressed on team performance (β=.36, t=2.98, p=.004) supporting hypothesis 6. We used an approach developed by Preacher and Hayes (2008) to investigate hypothesis 7 by generating bias corrected bootstrapped confidence intervals for the indirect of team identity as a mediator of the path between leader inclusiveness and performance (MacKinnon, Lockwood, & Williams, 2004). In confirmation of hypotheses 7, analysis generated confidence intervals that did not include zero for team identity (95% CI .03-.5). Results for control variables are incorporated in Figure 1 with dashed outlines.

While PLS SEM does not generate indicators of model fit, the model r-squared statistic indicates the extent to which hypothesised pathways combine to predict the dependent variable. The r-squared result for the full model, as depicted in Figure 1, was .47, which can be interpreted as indicating good fit (Chin, 1998).

In order to further investigate the quality of the structural model, we chose to assess the models capacity to predict identity threat and performance. In order to assess predictive relevance, we used PLS SEM to generate the Stone-Geisser criterion (Q2) with an omission distance of 7. Analysis resulted in a Stone–Geisser criterion Q2 value of 0.35 for perceived status differences, 0.48 for team identity and 0.39 for performance, which is substantially above the threshold value of zero, and which indicates the model’s predictive relevance (Henseler, Ringle, & Sinkovics, 2009). This supports our claim that leader inclusiveness has
a significant impact on team identity and perceived status differences, and also supports the utility of the pathways that we have investigated.

**Discussion**

The purpose of this research was to investigate the impact of leader inclusiveness on interprofessional team performance. In addition, a mediating role for team identity and for perceived status differences in this relationship, and moderating role for professional diversity, were hypothesized and investigated. This study was cross-sectional which means that we cannot claim support for causality, except through theoretical arguments (Frazier, Tix, & Barron, 2004). Given the theoretical rationale, we interpret the results as providing support for our proposition that leader inclusiveness reduces perceived status differences and, through this, enhances team performance, and that this mediated relationship is conditional on strong professional diversity. Analyses also support our proposition that leader inclusiveness increases the performance of interprofessional teams through team identity.

**Theoretical Implications**

This research makes several important theoretical contributions. First, while inclusion has been discussed as an important element in educational and social work practice, this study is one of very few to investigate the potential for leader inclusiveness to effect teamwork and interprofessional dynamics, and the only study to investigate a direct role for leader inclusiveness in influencing member social identification. Support for the effect of leader inclusiveness on team identity suggests that this style of leadership, by explicitly valuing each member’s unique contributions engenders a greater psychological engagement to the team. In doing so, leader inclusiveness likely lessens the social identity-related barriers to cross-professional interaction and facilitates the benefits associated with access to the knowledge and perspectives of diverse professions. Our finding that leader inclusiveness increases team identity is particularly significant as previous studies have identified
professional membership as an important source of social identification (Mitchell et al., 2011) and this has been argued as a critical source of interprofessional conflict (Xyrichis & Lowton, 2008).

Support for the positive impact of leader inclusiveness through team identity in interprofessional teams should be interpreted in the context of previous findings that team identity carries a risk that individuals will perceive pressure to conform to team preferences (Gaertner & Dovidio, 2000) and may also believe that a focus on group-level identity diminishes the value of their unique contribution (Wegge & Haslam, 2003). Leader inclusiveness has the effect of encouraging members to value themselves and each other for their unique attributes and skills, and also to contribute, through these specialist attributes, to superordinate team goals. A focus both on the value of team-level belonging as well as individual sub-group, professional, membership, fostered through leader inclusiveness, minimises the risks that members will move to premature consensus due to team pressure to conform, or perceive that their professional position is being diminished (Dovidio et al., 2008).

Our finding that leader inclusiveness lessens perceived status inequality suggests an important role in addressing the barriers to interaction common in professional hierarchies. Healthcare organisations, as professional bureaucracies, maintain status differentials (Thylefors, 2012), and this has been consistently linked to poor performance in diverse teams (Mathieu & Rapp, 2009). Our findings suggest that leader inclusiveness, by explicitly valuing each profession’s distinct contribution, establishes a perception of parity across professions. Such a perception of professional equivalence in relation to team contribution mitigates against the imposition of embedded status inequalities within the team. This is argued to limit members professional defence behaviors, which have been associated with information-withholding and poor performance. Support for the moderating role of professional diversity
in the relationship between reduced status differences and performance suggests that inclusiveness is likely to be more effective when teams are comprised of representatives from a variety of professions, due to the likely existence of greater perceived status differences in a more diverse team setting. This has important implications in an industry that has an increasing number of professions, embedded in a professional hierarchy that is perpetuated by both organisations and professional institutions (Colyer, 2004).

**Managerial Implications**

Our findings have important implications for human resource management and practice. For human resource managers, particularly in professional bureaucracies, our findings indicate that reducing perceived status differences may foster collaboration across professional boundaries. In particular, past research suggests that while minority perspectives have potential to significantly and positively impact performance (DeDreu & West, 2001), this contrasted with the tendency for unique information to remain unshared in groups (Stasser & Titus, 2003). Procedural and interactional justice have been found to reduce perceptions of differential treatment on the basis of nationality and future research could investigate the applicability of this relationship to professions (Ehrhardt, Shaffer, Chiu, & Luk, 2012; Mamman, Kamoche, & Bakuwa, 2012). The results also have some important implication of the selection and development of potential leaders, especially in healthcare organizations. Leadership selection may include a way to assess a leader’s past interprofessional experience and capacity to work across professional boundaries (Avery, Tonidandel, Griffith, & Quiñones, 2003). In addition, leadership development programs could include a focus on facilitating participation from lower status employees, but also about the importance of modeling interprofessional collaboration and developing a climate in which such collaboration is encouraged (Joplin & Daus, 1997).

**Limitations and Future Research**
There are a number of limitations of this study including a small sample size, which may have reduced the opportunity for significant relationships to be detected. This was compounded by our exploration of moderating effects (Dahl & Pedersen, 2004). However, we received support for most hypothesized relationships. In addition, our sample met the recommendations for size when using PLS SEM to analyse data (Hair, Sarstedt, Ringle, & Mena, 2012). Second, we utilised a method of measuring the dependent variable which employed leader perception. While the use of two different questionnaires lessened the likelihood of common method effects, there was the potential that leader responses were biased. The survey was anonymous in order to reduce the potential for social desirability response bias. However, it is recognised that leader responses, as well as those of members, may have been influenced by social desirability effects. The use of independent team assessment methods in future research would overcome limitations associated with dependent measure bias, and the use of a social desirability scale is also recommended (Podsakoff et al., 2003).

A potential further limitation of this study relates to the sample. This study used a sample of moderately interprofessional teams. This sample is particularly valuable given the increasing policy and clinical emphasis on interprofessional collaboration (Shrout & Bolger, 2002), however it may limit the extent to which findings are applicable to teams that are demographically diverse, or that vary on the basis of a different job-related characteristic. There is, however, some evidence that healthcare teams share many relevant characteristics with other organizational groups, such as decision complexity, environmental volatility and multiple demands (Jeffcott & Mackenzie, 2008). This reinforces the value of our findings for a range of organizational team settings. However, future research could usefully examine the extent to which our findings are generalizable to professions outside the healthcare industry and to other forms of bio-demographic and job-related diversity.
Future research could also be directed towards the contextual variables that influence inclusive leader effectiveness. The sample of teams in this study was drawn to ensure their involvement in complex decision-making, however, the specific characteristics of the teams’ decision-making tasks were not explored in detail. It is possible that leader inclusiveness has greater effects when teams were engaging in some tasks, such as those involving interdependence, over others. Future research could be directed towards extending this study by investigating the moderating effect of task type on leader impact, as well as other contextual issues such as team climate and perceptions of interactional justice, which have been shown to influence perceptions of inclusion (Ehrhardt et al., 2012; Ellemers et al., 2011).

Finally, we are aware that, while not a limitation of our model, the operationalisation of leader inclusiveness reflects a relatively specific set of leader behaviors. However, our quantitative data lend strong support for the utility of inclusiveness in leadership, which suggests that leadership of healthcare teams are well-advised to adapt these behaviors when dealing with interprofessional groups and indicates the potential benefit of future research into the value of inclusive leader behaviors across a range of relational leadership styles.

Despite these limitations, the data indicates that leadership has potential to influence professional collaboration towards both effective decision-making and performance, and suggests that there is potential for future research into the styles of leadership that may benefit interprofessional teams.

**Conclusion**

Leader inclusiveness, by valuing diverse professional contributions is well-suited to interprofessional contexts and achieving goals of collaboration across professional boundaries. The value of this finding should be assessed against evidence that social categorisation processes in professionally-diverse teams often lead to bias, conflict and poor
outcomes (Thylefors, 2012). Past research in both healthcare management and organisational studies has called for contributions to our knowledge of leadership styles that facilitate collaboration across social category boundaries (Reeves, MacMillan, & Van Soeren, 2010). Our findings indicate that, by explicitly recognising the value of divergent, often conflicting perspectives, inclusive leaders have potential to lessen the destructive perception that professional differences and contributions are not respected, thereby reducing the negative consequences of compositional diversity.
References


TABLE 1.

Variable Means, Standard Deviations, Scale Reliabilities and Correlation Coefficients

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Composite</th>
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<th>3</th>
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<tr>
<td>1 Team Tenure</td>
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<td>1.53</td>
<td>1.0</td>
<td>1.0 (a)</td>
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<td></td>
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<td>2 Team Size</td>
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<td>5.84</td>
<td>1.0</td>
<td>.07</td>
<td>1.0</td>
<td></td>
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<tr>
<td>3 Professional Diversity</td>
<td>.51</td>
<td>.15</td>
<td>1.0</td>
<td>-.13</td>
<td>-.13</td>
<td>1.0</td>
<td></td>
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<td></td>
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<tr>
<td>4 Leader Inclusiveness</td>
<td>5.20</td>
<td>1.02</td>
<td>.97</td>
<td>-.01</td>
<td>-.06</td>
<td>-.13</td>
<td>.95</td>
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<tr>
<td>5 Team Identity</td>
<td>5.34</td>
<td>0.72</td>
<td>.89</td>
<td>-.04</td>
<td>.05</td>
<td>-.10</td>
<td>.72**</td>
<td>.87</td>
<td></td>
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<tr>
<td>6 Status Differences</td>
<td>3.73</td>
<td>1.04</td>
<td>.93</td>
<td>.77</td>
<td>-.03</td>
<td>.19</td>
<td>-.79**</td>
<td>-.51**</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>7 Performance</td>
<td>5.20</td>
<td>.98</td>
<td>.95</td>
<td>.27*</td>
<td>.10</td>
<td>-.10</td>
<td>.50**</td>
<td>.54**</td>
<td>-.42**</td>
<td>.93</td>
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*p < .05  **p < .01 (a) bold-typed diagonal numerals represent the square-root of the average variance extracted.
TABLE 2.

Factor Coefficients

<table>
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<th>Status Differences</th>
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<th>Team Performance</th>
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<td>Status Differences 2</td>
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<td>-.35</td>
<td>-.43</td>
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<tr>
<td>Status Differences 3</td>
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<td>.92</td>
<td>.56</td>
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<tr>
<td>Team Identity 2</td>
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<td>.92</td>
<td>.51</td>
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<td>Performance 1</td>
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<td>.47</td>
<td>.92</td>
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<tr>
<td>Performance 2</td>
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<td>.49</td>
<td>.93</td>
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<tr>
<td>Performance 3</td>
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<td>.53</td>
<td>.94</td>
</tr>
<tr>
<td>Performance 4</td>
<td>.48</td>
<td>-.39</td>
<td>.50</td>
<td>.91</td>
</tr>
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</table>

Tabled values are standardized parameter estimates.
FIGURE 1

Model of Inclusive Leadership Effects in Interprofessional Teams
Moderating Effect of Professional Diversity on Identity Threat’s Impact on Performance
High Status Differences
Low Status Differences

Performance

High Diversity
Low Diversity