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There is much debate in community psychology literature as to the dimensions underlying the psychological sense of community (PSOC) construct. One of the few theoretical discussions is that of McMillan and Chavis (1986), who hypothesized four dimensions: Belonging, Fulfillment of Needs, Influence, and Shared Emotional Connection. Debate has also emerged regarding the role of identification within PSOC. However, few studies have explored the place of identification in PSOC. In addition, whereas PSOC has been applied to both communities of interest and geographic communities, to date little research has compared a single group’s PSOC with a community of interest to their PSOC with their geographic communities. The current study explored PSOC with participants’ interest and geographic communities in a sample (N = 339) of members of science fiction fandom, a community of interest with membership from all over the world. Support emerged for McMillan and Chavis’ (1986) four dimensions of PSOC, both within participants’
PSOC with their geographic communities and with their community of interest, with the addition of a fifth dimension, that of Conscious Identification. All dimensions emerged as significant predictors of overall sense of community in both community types. Participants reported higher levels of global PSOC with fandom than with their geographic communities, a pattern that also emerged across all factors separately. These results, and implications for PSOC research, are discussed. © 2002 John Wiley & Sons, Inc.

INTRODUCTION

In 1977, Seymour Sarason presented the concept of psychological sense of community as the overarching value by which community psychology should be defined. From that point, community psychologists began to work on empirically defining and measuring the construct.

In defining sense of community, it is important to understand what is meant by community itself. Gusfield (1975) distinguished between two major uses of the term community. The first is the territorial or geographic notion of the word. In this sense, community refers to a neighborhood, town, city or region, thus sense of community implies a sense of belonging to a particular area. The second is a more relational usage, concerned with the character of human relations without reference to location. This is the sense in which we use community when we refer to communities of interest such as work settings, hobby clubs, or religious communities. Whereas some (e.g., Puddifoot, 1985) see the territorial versus relational distinction as an essential division, and the cause of much conceptual and methodologic confusion, others (e.g., McMillan & Chavis, 1986) feel it does not necessarily affect the definition of PSOC, which can be applied equally well to both types of community. In fact, the essence of PSOC, and the dimensions that underlie the construct, may be the same for both community types.

Within traditional PSOC research, where considerable work has been done on territorial or geographic communities, less research has been performed on looking in depth at PSOC within communities of interest. Most of the work that has been done on relational rather than geographic communities has tended to focus on the workplace (Pretty & McCarthy, 1991; Royal & Rossi, 1996), although a study by Pretty, Andrewes and Collett (1994) explored adolescents’ PSOC within both their neighborhoods and their school. Such studies have shown that PSOC can be applied to such relational communities.

In studying PSOC, researchers (e.g., Bardo, 1976; Buckner, 1988; Doolittle & MacDonald, 1978; Glynn, 1981; McMillan & Chavis, 1986; Skjaeveland, Garling, & Maeland, 1996) have debated and theorized about the dimensions that underlie this construct. This ongoing debate has led to the development of several different scales, each measuring distinct hypothesized dimensions of PSOC. Such scales include Bardo and Bardo’s (1983) Community Satisfaction Scale, Glynn’s (1981) Sense of Community Scale, Buckner’s (1988) Neighborhood Cohesion Index, and, more recently, Skjaeveland et al.’s (1996) Multidimensional Measure of Neighboring. Such developments have added to our understanding of PSOC, have developed scales for many specific contexts, and have also created methodologic confusion and lack of strong theory building, thus restricting the comparability of results across settings (Chipuer & Pretty, 1999; see Obst, Zinkiewicz & Smith, 2002, for a comprehensive review of PSOC literature).
One of the few integrative theories of PSOC that has emerged is that of McMillan and Chavis (1986), revised by McMillan (1996), which may provide the best foundation on which to build our understanding of communities. According to McMillan and Chavis (1986), PSOC consists of four elements: Membership, Influence, Integration and Fulfillment of Needs, and Shared Emotional Connection. Membership refers to the feeling of belonging, of being part of a collective, and identification with the community. In relation to Influence, for a group to be both cohesive and attractive it must influence its individual members while allowing them to feel they have some control and influence over it. The third dimension, Integration and Fulfillment of Needs, refers to the idea that for a community to maintain a positive sense of togetherness, the individual-group association must be rewarding for the individual members. In relation to Shared Emotional Connection, McMillan and Chavis (1986) suggest that the more people interact, the stronger the bonds between them, and that these bonds then develop into a community spirit. They argue that these subelements work together to create the dimensions, which, in turn, work dynamically together to create and maintain an overall sense of community. Based on this theory, Chavis, Hogg, McMillan and Wandersman (1986) developed the 12-item Sense of Community Index (SCI).

Several investigators have found support for McMillan and Chavis’ (1986) hypothesized dimensions. Such support has tended to come from qualitative studies (e.g., Brodsky, 1996; Plas & Lewis, 1996; Sonn & Fisher, 1996) rather than from quantitative factor analyses. However, Obst et al. (2002), who examined PSOC in science fiction fandom, an international community of interest, and used a number of different measures of PSOC and not just the SCI, did find quantitative support for McMillan and Chavis’ dimensions.

Recent theorists (Fisher & Sonn, 1999; Puddifoot, 1995) have also suggested that differences in levels of PSOC may be understood in terms of the degree to which members identify with their community. Identification with the community is obviously an important aspect of PSOC dimensions such as McMillan and Chavis’ (1986) idea of Membership. Obst et al. (2002) explored the role of identification within PSOC using social identity theory (SIT), a well-established theory of group processes and intergroup relations (Abrams & Hogg, 1990; Tajfel & Turner, 1979; see Obst et al., 2002 for a fuller explanation of SIT).

Recent studies have shown the utility of using an SIT framework to understand the relationship of identification to PSOC. Smith and Ryall (1999) examined PSOC and ingroup identification with one’s neighborhood, incorporating SIT measures of identification as well as traditional PSOC measures. Identification emerged as distinct from other PSOC dimensions and was also a significant predictor of overall sense of community. Obst et al. (2002), who also used SIT-derived identification measures, similarly reported that Identification emerged as a separate dimension of PSOC within science fiction (SF) fandom.

The current study continued the exploration of PSOC in the latter unique relational community. Science fiction fandom is a community of interest with membership from all over the world (Hansen, 1994), yet this community is clearly aware of its own identity and history (see Obst et al., 2002, for a brief history of SF fandom).

In light of the debate in the literature as to the dimensions underlying PSOC and their applicability to both interest and geographic communities, the present study aimed to examine the factor structure underlying PSOC in terms of its consistency across both types of communities. Furthermore, on the basis of recent evidence and
a theory that identification has a separate role to play in PSOC, this study examined
the role of identification in the dimensions of PSOC by including SIT-derived mea-
sures of ingroup identification with participants' geographic and interest communi-
ties. Lastly, the present study aimed to compare the contribution of dimensions of
PSOC to SF fans' PSOC with SF fandom, their community of interest, and their PSOC
with the geographic communities in which they were living.

Based on past work that has found support for McMillan and Chavis' theory of
PSOC, we hypothesized that evidence would be found for the four dimensions of
Membership, Influence, Fulfillment of Needs, and Shared Emotional Connection put
forward in their theory. We also expected that this support would be found in both the
gеographic community and the community of interest.

On the basis of recent studies that have found identification to be distinct from
the McMillan and Chavis dimensions (Obst et al., 2002; Smith & Ryall, 1999), we also
hypothesized that identification would emerge as a separate dimension in its own
right in both the geographic community and the community of interest.

In light of discussion suggesting that in modern society communities of interest
are becoming stronger than geographic communities, we hypothesized that partici-
pants would report a stronger PSOC with fandom, their community of interest, than
with their geographic community.

Finally, we hypothesized that all dimensions, including Identification, would emerge
as significant predictors of overall psychological sense of community in both types of
community. However, we made no predictions regarding the strength of individual
predictors of PSOC.

**METHOD**

**Participants**

Participants were 359 members of SF fandom attending Aussiecon 3, the 1999 World
Science Fiction Convention. Ages of participants ranged from 18–79 years, with a
mean age of 39.5 years ($SD = 10.8$ years). Of those, 186 (52%) were male and 173
(48%) female. For more information on the participants see Obst et al. (2002).

**Materials**

Research materials consisted of a questionnaire measuring basic demographics, PSOC
with SF fandom, and PSOC with the participants' neighborhood, ingroup identification
with SF fandom and with the neighborhood, and a number of other scales not
ised in the present study (see Obst et al., 2002, for details of these scales).

Twelve items assessed gender, age, nationality, ethnicity, marital status, financial
status, education, length of membership in fandom, and major forms of contact with
fandom. The next 12 items assessed the PSOC of participants towards SF fandom,
based on the Sense of Community Index (Chavis et al., 1986) modified to refer to
fandom. Fourteen items to assess levels of identification with the SF community were
taken from the Three Dimensional Strength of Group Identification Scale (Cameron,
2000), which were again modified to refer to fandom. Cameron's (2000) scale has only
recently been developed, and it was included because it contains three subscales
tapping into different dimensions of ingroup identification: affective aspects (Ingroup
Affect subscale), consciousness of group membership (Centrality subscale), and sense of connection with other ingroup members (Ingroup Ties subscale).

Two questions assessing self-reported global feelings of PSOC with fandom were also included (e.g., "In general, I feel that SF fandom has a strong sense of community."). Such global measures have been used in previous research (e.g., Wilson & Baldassare, 1996).

To assess participants' PSOC and identification with their geographic communities, the 12-item Sense of Community Index (Chavis et al., 1986) and the 14-item Three Dimensional Strength of Group Identification Scale (Cameron, 2000) were again used, adjusted for neighborhoods. The two global measures were also included but with reference to geographic rather than interest community (e.g., "The neighborhood I live in has a strong sense of community.").

All items were responded to on Likert scales ranging from 1 (strongly disagree) to 7 (strongly agree), and all scales contained a number of negatively worded items, which were reverse scored before analysis.

Procedure

See Obst et al. (2002) for a detailed description of the procedure. The questionnaire and associated consent form were included in the information packs given to all convention delegates when they registered. In this manner, all 1200 convention attendees were given the opportunity to participate in the research. Participants placed their completed questionnaire in one of two sealed boxes (similar to those used at polling stations) placed at the study information table and near the convention registration desk. In total, 359 of the 1245 members attending the convention returned completed questionnaires, representing an approximately 30% response rate.

RESULTS

Dimensions of Sense of Community in SF Fandom

The 25 items measuring PSOC and identification with SF fandom were entered into a principal components analysis. Inspection of communalities and correlation matrices indicated that the data were suitable for this analysis. This was confirmed by a Kaiser–Meyer–Olkin (KMO) sampling adequacy of .92 and a significant Barlett's test of sphericity. Five factors with eigenvalues above 1 emerged, accounting for 51.5% of the total item variance. The solution was subjected to an orthogonal varimax rotation as none of the correlations between factors were greater than .4.

The 25 items measuring PSOC and identification with the neighborhood in which participants lived were then entered into another principal components analysis. Inspection of communalities and correlation matrices again indicated that the data were suitable for analysis, confirmed by a KMO sampling adequacy of .93 and a significant Bartlett's test of sphericity. Again five factors with eigenvalues above 1 emerged, accounting for 55.2% of the total item variance. This solution too was subjected to orthogonal varimax rotation, as none of the correlations between factors were greater than .4.

Items loading on the five factors were consistent for both fandom and geographic communities, except for the item "People who live in my neighborhood/belong to fandom get along well." This item loaded on Factor 1 in the geographic community
analysis and Factor 4 in the fandom analysis. This item was, therefore, neither included in the calculation of scales based on these factors nor in any further analysis.

A summary of both factor solutions is shown in Table 1. In the fandom analysis, seven items loaded above .40 on the first factor, which accounted for 19.9% of the variance in the data, whereas in the geographic community analysis eight items loaded above .40 on the first factor, accounting for 17.2% of the variance. Items that dealt with being attached to or belonging to the neighborhood/SF fandom loaded on this factor (e.g., “I feel at home in this neighborhood/SF fandom; "I think my neighborhood/SF fandom is good to belong to/a good place for me to live."”). Some identification items from Cameron’s (2000) Ingroup Affect subscale also loaded on this factor (e.g., “I often regret living in my neighborhood/belonging to fandom; "In general I feel good when I think about living in this neighborhood/belonging as a part of SF fandom.”). This factor was thus labeled Belonging.

In the fandom data, five items loaded above .40 on Factor 2, which accounted for 14.2% of the variance. In the geographic community data, this factor emerged as Factor 3, accounting for 11.7% of the variance. Table 2 shows the items and factor loading for both analyses. Items loading on this factor were those from Cameron’s (2000) Centrality subscale dealing with personal identification with their communities (e.g., “I often think about the fact that I am a part of my neighborhood/SF fandom; "I am not usually conscious of the fact that I am a part of my neighborhood/SF fandom.”). This factor was labeled Conscious Identification.

The third factor in the fandom data accounted for 7.6% of the variance, with four items loading above .40. In the geographic community analysis, this was the second factor, accounting for 12.2% of the variance. Table 3 shows the items and factor loading for both analyses. Items loading on this factor were concerned with emotional support from and ties to fellow members (e.g., “Very few of my neighbors/fellow fans know me; "I feel strong ties to my neighbors/fellow fans.”). Items loading on this factor came from the SCI and Cameron’s (2000) Ingroup Ties subscale. This factor was labeled Emotional Connection and Ties.

<table>
<thead>
<tr>
<th>Item</th>
<th>SCI Scale</th>
<th>NH loading</th>
<th>Fandom loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think my neighborhood/SF fandom is a good place for me to live/to belong to.</td>
<td>SCI .82</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>I feel at home in my neighborhood/SF fandom.</td>
<td>SCI .78</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>I don’t feel good when I think about living in my neighborhood/being a part of SF fandom.</td>
<td>CIA -.76</td>
<td>-.65</td>
<td></td>
</tr>
<tr>
<td>In general I’m glad to live in my neighborhood/be a part of SF fandom.</td>
<td>CIA .70</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>In general I feel good when I think about living in this neighborhood/being a part of SF fandom.</td>
<td>CIA .60</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>I often regret that I live in this neighborhood/belonging to SF fandom.</td>
<td>CIA -.66</td>
<td>-.55</td>
<td></td>
</tr>
<tr>
<td>I expect to live in this neighborhood/be a part of SF fandom for a long time.</td>
<td>SCI .68</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>People who live in my neighborhood/belong to fandom get along well.</td>
<td>SCI .50</td>
<td>Loads on Factor 4</td>
<td></td>
</tr>
</tbody>
</table>

Note: The Belonging Factor is Factor 1 for both neighborhood and fandom communities.
NH = based on neighborhood data. SCI = Sense of Community Index (Chavis et al., 1998). CIA = Ingroup Affect Subscale (Cameron, 2000).
### Table 2. Item Loadings for Neighborhood and SF Fandom on Conscious Identification Factor

<table>
<thead>
<tr>
<th>Item</th>
<th>NH Scale</th>
<th>Fandom Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general being a part of my neighborhood/SF fandom is an important part of my self image.</td>
<td>CC .76</td>
<td>.72</td>
</tr>
<tr>
<td>Being a part of my neighborhood/SF fandom has very little to do with how I feel about myself.</td>
<td>CC -.74</td>
<td>-.69</td>
</tr>
<tr>
<td>I often think about the fact that I am a part of my neighborhood/SF fandom.</td>
<td>CC .71</td>
<td>.65</td>
</tr>
<tr>
<td>I am not usually conscious of the fact that I am a part of my neighborhood/SF fandom.</td>
<td>CC -.71</td>
<td>-.59</td>
</tr>
<tr>
<td>It is important to me to live in this particular neighborhood/belong to SF fandom.</td>
<td>SCI .68</td>
<td>.52</td>
</tr>
</tbody>
</table>

Note: The Conscious Identification Factor is Factor 2 for fandom, and Factor 3 for the neighborhood. NH = based on neighborhood data. SCI = Sense of Community Index (Chavis et al., 1986). CC = Centrality Subscale (Cameron, 2000).

Six items loaded above .40 on Factor 4 in the fandom data, which accounted for 6.2% of the variance, while five items loaded onto this factor in the geographic community data, which accounted for 9.7% of the variance. Table 4 shows the items and factor loading for both analyses. Items loading on this factor were those relating to similarity of members (e.g., “I have a lot in common with my neighbors/fellow fans;” “My neighbors/fellow fans and I want the same thing from our neighborhood/SF fandom.”) and the ability to work together and get things done (e.g., “If there was a problem in this neighborhood/SF fandom, people who live here can get it solved.”). Items loading on this factor came from the SCI and Cameron’s (2000) Ingroup Ties subscale. This factor was labeled Shared Values and Cooperative Behavior.

Three items loaded on the fifth factor, which accounted for 3.5% of the variance in the fandom data and 4.4% of the variance in the geographic community data. Table 5 shows the items and factor loading for both analyses. These items, all from the SCI, related to influence over the communities (e.g., “I have almost no influence over what this neighborhood/SF fandom is like;” “I care about what my neighbors/fellow fans think about my actions.”). This factor was labeled Influence.

The items loading on each factor were then subjected to reliability analysis using Cronbach’s alpha. As can be seen from Table 6, the alpha values for each factor were

### Table 3. Item Loadings for Neighborhood and SF Fandom on Emotional Connection and Ties Factor

<table>
<thead>
<tr>
<th>Item</th>
<th>NH Scale</th>
<th>Fandom Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t feel a sense of being connected with my neighbors/fellow fans.</td>
<td>CIT .76</td>
<td>.52</td>
</tr>
<tr>
<td>I find it difficult to form a bond with my neighbors/fellow fans.</td>
<td>CIT .70</td>
<td>.64</td>
</tr>
<tr>
<td>Very few of my neighbors/fellow fans know me.</td>
<td>SCI .68</td>
<td>.72</td>
</tr>
<tr>
<td>I feel strong ties to my neighbors/fellow fans.</td>
<td>CIT -.65</td>
<td>-.49</td>
</tr>
</tbody>
</table>

Note: The Emotional Connection and Ties Factor is Factor 3 for Fandom, and Factor 2 for the neighborhood. NH = based on neighborhood data. SCI = Sense of Community Index (Chavis et al., 1986). CIT = Ingroup Ties Subscale (Cameron, 2000).
Table 4. Item Loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
<th>NH loading</th>
<th>Fandom loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a lot in common with my neighbors/fellow fans.</td>
<td>CIT</td>
<td>.73</td>
<td>.72</td>
</tr>
<tr>
<td>I really fit in with my neighbors/fellow fans.</td>
<td>CIT</td>
<td>.68</td>
<td>.67</td>
</tr>
<tr>
<td>People in this neighborhood/SF fandom do not share the same values.</td>
<td>SCI</td>
<td>-.64</td>
<td>-.62</td>
</tr>
<tr>
<td>If there is a problem in this neighborhood/SF fandom people who live here/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fans can get it solved</td>
<td>SCI</td>
<td>.54</td>
<td>.58</td>
</tr>
<tr>
<td>My neighbors/fellow fans and I want the same thing from this neighborhood/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF fandom.</td>
<td>SCI</td>
<td>.54</td>
<td>.52</td>
</tr>
<tr>
<td>People who live in my neighborhood/belong to fandom get along well</td>
<td>SCI</td>
<td>Load on</td>
<td>.48 Factors 1</td>
</tr>
</tbody>
</table>

Note. The Shared Values and Cooperative Behavior Factor is Factor 4 for both neighborhood and fandom communities. NH = based on neighborhood data. SCI = Sense of Community Index (Chavis et al., 1986). CIT = Ingroup Ties Subscale (Cameron, 2000).

Moderate to high. Thus, new composite variables were made for each factor by taking the mean of all items loading on that factor, after reverse scoring appropriate items, with the exception of the item "People who live in my neighborhood/belong to fandom get along well," which loaded on Factor 1 in the geographic community analysis and Factor 4 in the fandom analysis. Mean scores for each factor are shown in Table 6, and can range from 1–7 (highest level of the variable).

Comparison of Geographic Community and Fandom Mean Scores

Factors. As hypotheses regarding differences between fandom and neighborhood PSOC were exploratory, to allow for differences in both directions two-tailed paired sample t-tests were used to assess differences between fandom and neighborhood on the five PSOC dimensions. The t-tests rather than MANOVA were used for factors that were not highly correlated. These paired sample t-tests, evaluated at a familywise error rate of p < .05, revealed that for all factors participants reported significantly higher levels of PSOC with their interest community, SF fandom, than with their geographic communities, as Table 6 shows.

Table 5. Item Loadings for Neighborhood and SF Fandom on Influence Factor

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale</th>
<th>NH loading</th>
<th>Fandom loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have almost no influence over what this neighborhood/SF fandom is like.</td>
<td>SCI</td>
<td>-.55</td>
<td>-.61</td>
</tr>
<tr>
<td>I can recognize most of the people who live in my neighborhood/</td>
<td>SCI</td>
<td>.54</td>
<td>.58</td>
</tr>
<tr>
<td>are part of SF fandom.</td>
<td>SCI</td>
<td>.45</td>
<td>.52</td>
</tr>
</tbody>
</table>

Note. The Influence Factor is Factor 5 for both neighborhood and fandom communities. NH = based on neighborhood data. SCI = Sense of Community Index (Chavis et al., 1986).
Table 6. Alpha Levels, Means, Standard Deviations, and T-values for Neighborhood and SF Fandom PSOC Factors and Global PSOC

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Items</th>
<th>NH</th>
<th>α</th>
<th>Fan</th>
<th>α</th>
<th>Neighborhood M (SD)</th>
<th>SF Fandom M (SD)</th>
<th>t(df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td>7</td>
<td>.76</td>
<td>.68</td>
<td>5.32 (1.07)</td>
<td>5.98 (0.91)</td>
<td>8.94 (335)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Connection and Ties</td>
<td>4</td>
<td>.84</td>
<td>.78</td>
<td>3.32 (1.48)</td>
<td>4.91 (1.23)</td>
<td>16.64 (355)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscious Identification</td>
<td>5</td>
<td>.79</td>
<td>.85</td>
<td>3.37 (1.29)</td>
<td>4.55 (1.28)</td>
<td>13.53 (351)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Values</td>
<td>5</td>
<td>.74</td>
<td>.67</td>
<td>3.92 (1.07)</td>
<td>4.30 (1.01)</td>
<td>4.80 (352)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td>3</td>
<td>.86</td>
<td>.64</td>
<td>3.75 (1.26)</td>
<td>4.22 (1.09)</td>
<td>5.71 (353)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Sense of Community</td>
<td>2</td>
<td>—</td>
<td>—</td>
<td>4.38 (0.94)</td>
<td>5.21 (0.79)</td>
<td>6.19 (350)*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. All scales are scored so that 1 = lowest level of factor and 7 = highest. NH = based on neighborhood data.
* p < .001.

Overall sense of community. As Table 6 also shows, a two-tailed paired sample t-test revealed that mean global PSOC with fandom was significantly greater than was mean global PSOC with geographic communities.

Prediction of overall sense of community. To examine the power of each of the dimensions in predicting overall sense of community, a standard multiple regression analysis was run on fandom and neighborhood data separately. The five dimensions of Belonging, Emotional Connection, Shared Values, Influence, and Conscious Identification accounted for 29% of the variance in fandom sense of community ($F[5,320] = 25.31; p < .001$) and 34% of the neighborhood sense of community variance ($F[5,339] = 27.59; p < .001$). Table 7 presents the beta weights and standard errors for these regressions. Examination of squared partial correlations and beta weights showed that the strongest predictor of fandom sense of community was Conscious Identification, whereas the strongest predictor of neighborhood sense of community was Belonging.

DISCUSSION

The results of this study provided support for all hypotheses. Support was found for McMillan and Chavis' four theorized dimensions, which emerged as essentially con-

Table 7. Standard Multiple Regression Analysis Predicting Overall Sense of Community with Neighborhood and SF Fandom

<table>
<thead>
<tr>
<th>Variables</th>
<th>Neighborhood $R^2 = .34$</th>
<th>SF Fandom $R^2 = .29$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE</td>
</tr>
<tr>
<td>Belonging</td>
<td>.39**</td>
<td>.02</td>
</tr>
<tr>
<td>Shared Values</td>
<td>.27**</td>
<td>.02</td>
</tr>
<tr>
<td>Emotional Connection</td>
<td>.14**</td>
<td>.01</td>
</tr>
<tr>
<td>Influence</td>
<td>.33**</td>
<td>.01</td>
</tr>
<tr>
<td>Conscious Identification</td>
<td>.07*</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. *p < .01. **p < .001.
sistent across both SF fandom, the interest community, and the neighborhood (the geographic community). Ingroup identification emerged as a separate dimension of PSOC in its own right in both types of communities. Furthermore, participants’ PSOC and their mean scores on all dimensions of PSOC were significantly higher for SF fandom, their interest community, than for their geographic communities. Finally, all five dimensions emerged as significant predictors of overall sense of community in both communities.

In examining the dimensions that underlie PSOC in SF fandom, we found that the factors that emerged in the factor analysis supported those theorized by McMillan and Chavis (1986), with the addition of a Conscious Identification dimension. These same dimensions emerged in the analysis of items regarding participants’ PSOC with their geographic communities.

The first factor, labeled Belonging, tapped items dealing with being attached to, a part of, or feelings of belonging to fandom or the community within which respondents lived. Some identification items also loaded on this factor. This factor fits with McMillan and Chavis’ (1986) dimension of Membership, the underlying sense of belonging and identification with the community.

As already mentioned, a factor emerged beyond the four theorized by McMillan and Chavis (1986). Items loading on this factor related to conscious identification and awareness of fellow members. This factor was thus labeled Conscious Identification.

These results suggest that separate aspects of identification may relate to different dimensions of PSOC. Whereas the more affective and connectedness components of identification are subsumed within McMillan and Chavis’ theorized dimensions of PSOC, awareness of group membership is an important aspect of Identification, not included within their theoretical model. These findings are consistent with those of Smith and Ryall (1999), who also found that Identification emerged as a separate dimension to PSOC in their examination of neighborhoods, and the findings of Obst et al. (2002) in their large survey of SF fandom.

A third factor was labeled Emotional Connection and Ties, which tapped items to do with friendship and bonds to other community members. This factor fits with McMillan and Chavis’ (1986) notion of Shared Emotional Connection. The items loading on the fourth factor were those relating to similarity of members and the ability to work together and get things done. This factor was labeled Shared Values and Cooperative Behavior. This factor is consistent with McMillan and Chavis’ notion of Fulfillment of Needs. Finally, the factor labeled Influence, comprising items related to influence over the community, is similar to McMillan and Chavis’ (1986) notion of Influence. This is the idea of needing a reciprocal relationship between individuals and the community in terms of their impact on one another.

The emergence of these factors in both fandom and geographic communities provides strong support for McMillan and Chavis’ (1986) conceptualization of PSOC. Furthermore, it indicates that this theoretical conceptualization can be applied equally well to geographic communities and communities of interest. This is an important finding in terms of theory building in the PSOC area.

The results of this study showed that although the dimensions of PSOC were consistent across both interest and geographic communities, participants felt higher levels of PSOC with fandom than with the geographic communities within which they were living. This is an interesting finding, suggesting that PSOC can be a strong facet of communities of interest. This may be because members choose to belong to such communities and are drawn together through a common interest. In the present
study, this finding is of particular significance, as SF fandom operates on an international basis with fewer geographic connections than in many other relational communities. However, this study is limited in making stronger conclusions in relation to this finding, as participants were in a fannish context (an SF convention) rather than in their local neighborhood. Replication of this research is needed with data collected in a more neutral context.

Interestingly, higher scores on each of the factors also emerged in relation to PSOC with fandom, the community of interest, than in their PSOC with geographic communities. Respondents reported feeling more belonging, ties, shared values, and influence with fandom than with their local communities. This may be seen as evidence for Durkheim's (1964) observation that modern society tends to develop community around interest rather than locality. These results are also consistent with the work of writers such as Rheingold (1991) concerning the ability of the internet to support virtual communities.

Respondents were also more aware of their membership in fandom, their community of interest, than in their geographic community membership. This, again, may be due to greater levels of perceived choice of membership and to ties between members based on common interest. However, the collection of the data in the fandom context also may have contributed to this result.

In terms of the significance of the dimensions in predicting overall sense of community, all dimensions significantly contributed to the prediction of both fandom and neighborhood sense of community. Interestingly, in SF fandom, Conscious Identification with fandom emerged as the strongest predictor, whereas, in the neighborhood setting, it was the weakest predictor. The Belonging dimension was a strong predictor in both communities. This suggests that Belonging is an important dimension of sense of community in whatever context we are examining. Identification, however, seems to be more important in the communities to which we choose to belong than in those communities that we may have made a less conscious decision to join. Influence was an important predictor in geographic communities; however, it was not at all important in the interest community. This, again, may be due to the element of perceived choice. If one chooses to belong to an association because of common interest, then the need for influence over that association may be less than the need to feel some control or influence over the area in which one lives.

As in Obst et al. (2002), and Smith and Ryall (1999), the ingroup identification measures, taken from the social identity perspective, were useful in expanding our understanding of the role of identification in PSOC. Results showed that identification does play a role in PSOC, and even though it relates to and to some extent overlaps with McMillan and Chavis' (1986) theorized dimensions of PSOC, the centrality aspect of identification is not subsumed within these dimensions.

The results of the current study are encouraging in terms of theory building. McMillan and Chavis (1986) have provided one of the few theoretical bases from which to understand the dimensions underlying PSOC. This study provides empirical support for McMillan and Chavis' (1986) theorized dimensions by showing that their dimensions emerged both when examining PSOC in a relational community that operates internationally and when examining respondents' PSOC with the geographic communities where they live. In this light, the present study shows that their theory is applicable to many kinds of communities. However, the present study also suggests an aspect of PSOC that should be further investigated, namely, awareness of the community and one's membership in it.
In conclusion, these findings have implications for future PSOC research. This study shows that McMillan and Chavis's (1986) theoretical conceptualization of PSOC has application in diverse communities and, thus, can provide a solid basis for further theory building work. Furthermore, it shows that identification does have a separate and important role to play in PSOC, which warrants further investigation. Finally, in terms of its wider implications, this study indicates that community and a strong sense of community do still exist. It may be where we find it rather than its strength or nature that is changing.

REFERENCES


