VIEWS FROM WITHIN: PSYCHOLOGISTS’ ATTITUDES TOWARDS OTHER PSYCHOLOGISTS

DISSERTATION

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ABSTRACT

While the field of psychology has directed a great deal of attention towards educating the public about what psychologists do and what the field has to offer, little attention has been focused inward on the internal fragmentation of the field and how psychologists actually view other psychologists. The current study was based on the general assumptions that psychologists identify by subfield, that they hold less positive attitudes towards other subfields compared to their own, and that these attitudes impact behavior. While these had not been looked at directly in previous research, empirical and theoretical support for these assertions existed in various lines of literature. More specifically, it was expected that psychologists would feel more positively about their own subfield than other subfields and that those displaying stronger self-stereotyping, subfield identification, affective commitment and subfield self-esteem would have less favorable attitudes towards members of other subfields than participants with lower levels. Further, it was expected that the greater the perceived threat from another subfield the less favorable one’s attitudes toward that other subfield would be, that graduate students’ perception of faculty attitudes would predict graduate student attitudes, that time within the field of psychology would predict favorable attitudes towards one’s own subfield and that attitudes toward another subfield would influence behavior regarding
that particular subfield. Psychology faculty members and graduate students across the United States were invited to participate by completing an online survey created for the purposes of the present study. Results indicated basic support for the three assumptions, with participants identifying by subfield as well as viewing other psychologists as belonging to subfields. They also felt more positively about their own subfield than others, with their attitudes predicting their behaviors toward other subfields. However, support for the specific hypotheses was mixed and incongruent with some of the literature predictions. Both congruent and incongruent findings are discussed, as well as possible explanations for the findings and a re-conceptualization of the how attitudes are formed towards other subfields. Future research directions are offered as implications of differential attitudes for the field of psychology are discussed.
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CHAPTER 1
INTRODUCTION

If ever the field of psychology could contribute to the betterment of the world, it is today. Rates of behavior-related health problems are on the rise, illnesses that we are in a position to understand, treat and prevent. Inter-group strife and conflict are ever present, an area of extensive research in psychology. A rapidly changing workforce has left individuals in need, now more than ever, of help adjusting with the changing role of work in their lives, help we are capable of providing. A changing sense of national security has left our nation in limbo, and we are capable of helping our country cope and adapt. The examples are endless. As a profession and a discipline, we are uniquely equipped to aid in the understanding and resolution of many of the problems that we are currently facing.

A great deal of effort has gone into ensuring that the public recognizes this. Numerous studies have examined the public’s image of psychology and psychologists (see Raviv & Weiner, 1995; Rosenthal, McKnight & Price, 2001; Schindler, Berren, Hannah, Beigel & Santiago, 1987, for examples). Money has been spent educating the public on psychology and what psychologists do. For instance, the American Psychological Association (APA) sponsors an annual conference with the purpose of planning advocacy strategies (Chamberlin, 2001). The APA has numerous links on its
homepage with information geared toward educating the public about what psychology is and what psychologists can do and APA President Ronald Levant has as a primary goal of his presidency to make psychology a household word so that the public gains an increased understanding and appreciation of the field (Levant, 2005). The APA has also started a national public education campaign entitled “Talk to Someone Who Can Help” in order to form a partnership between psychologists and the public to educate the public on making informed decisions about seeking psychological care (American Psychological Association Practice Directorate, 2005). The American Psychological Society (APS) has a Campaign for Advancing Psychological Science that is geared towards increasing resources for and recognition of the accomplishments of the field of psychology (American Psychological Society, n.d.a). Lobbying efforts have focused on obtaining equal billing for psychology with other professions. For example, the APA lobbied to have the United States Department of Health and Human Services fund psychology internships under Medicare’s Graduate Medical Education program (Chamberlin, 2001). Certainly, psychology as a profession and a discipline exists as one cohesive unit in the mind of many psychologists, other mental health professionals and the public, existing as an academic, professional and political unit. That the APA has over 150,000 members representing all areas of psychology (American Psychological Association, 2005) and the APS 12,000 (American Psychological Society, n.d.b) attests to the entity that is psychology.

So much focus has been directed outward towards the public and its view of psychology and psychologists that scant attention has been paid to what psychologists think of other psychologists. We have neglected to focus inward on ourselves, an
oversight spanning our field’s history (Youniss, Lorr & Stefic, 1985). We cannot expect the public to hold favorable views of psychology and psychologists if we ourselves do not. Here I am speaking specifically not of psychology as a whole, but of the various subfields or areas within psychology (counseling, social, school, developmental, etc.) and the views they hold of each other. For although we may all refer to ourselves as “psychologists,” psychology is, in truth, comprised of smaller subgroups within the field. And the limited research on the matter suggests psychologists hold at least some unfavorable attitudes towards “other” psychologists or subfields (Hartnett, Simonetta & Mahoney, 1989). This is likely not surprising from the standpoint of personal experiences. Nor is it surprising from a theoretical standpoint. By the very nature of being subdivided into and identifying by subfields, psychology has ready-made ingroups and outgroups and there is a vast amount of literature supporting the finding that we view our own “in” groups more favorably than other “out” groups (Cadinu & Reggiori, 2002; Reichl, 1997).

Beyond understanding what the attitudes are, it is also important to understand their consequences. Again, there is a vast amount of literature relating attitudes and group identification with behavioral outcomes (for reviews of the literature, see Hewstone, Rubin & Willis, 2002; Mummendey, 1983; Tesser & Shaffer, 1990). As attitudes among subfields have received scant attention in the field, likewise the consequences of these have received little attention. However, one can speculate. It has been noted that there is a history of poor information communication between subfields (Foxhall, 2000). The ramification of this may be the tendency for research conducted by one subfield to remain within that subfield, with little crossover and sharing of information between subfields.
Perhaps this lack of communication is a direct consequence of the value subfields place on the information other subfields have to offer. Additionally, this may contribute to the continued separation between research and practice. The latter received attention when the National Institute of Mental Health pushed to fund research on public health in an attempt to link research and practice (Foxhall, 2000). While some psychologists are excited about the possibility of bridging the gap between science and practice, others are skeptical it can become a reality. At the heart of this skepticism may be psychologists’ differing attitudes. In the practice realm, beyond the lack of integration of science and practice, referrals and consultations may be limited to those professionals belonging to one’s same subfield, directly affecting clientele. The consequences need not be limited to research and practice. Other possible effects may be seen within academic departments in hiring, promotion and funds allocation practices. For example, when searching for new faculty, searches may begin having already excluded a great number of qualified applicants simply because they are not from a particular concentration, regardless of their experiences. However, because researchers have not examined these issues, the exact consequences of these attitudes remain to be seen.

Focus has been directed towards the public’s view of psychology and what psychologists do. Beyond the question of whether the public fully realizes the contributions the field can provide is the question of whether psychologists do and if the contributions the field currently has to offer are its best. It is time that we focused on ourselves. If areas are not sharing information, integrating findings and building off one another, the contributions are not their best. If faculty and professional appointments are being influenced by or limited to area identification over merit, the field is not offering its
best. If professionals in practice are limiting referrals and consultations to peers within their own subfield, clients are not getting our best. It is for these reasons that the current research is being undertaken: to examine the attitudes psychologists have regarding other psychologists and the consequences of these attitudes. The following sections will present evidence suggesting that (a) psychologists do identify by subfield, (b) identification by subfield has implications for attitudes toward other subfields, and (c) that these attitudes are likely to impact behavior.
CHAPTER 2

INDICATIONS FOR IDENTIFICATION BY SUBFIELD

Although the general public may view all psychologists as belonging to one cohesive group, and despite any wishes to think of ourselves as members of one collective “household,” the reality exists that we are differentiated from one another by the subfield to which we belong. Our “house” is composed of naturally formed and selected ingroups and outgroups and the literature suggests that psychologists are more likely to identify one’s subfield as the ingroup rather than psychology as a whole. Two lines of research in particular, those on optimal distinctiveness theory and self-categorization theory, suggest that these divisions exist.

Optimal Distinctiveness Theory

That psychologists would identify with their respective subfields as the ingroup rather than with the larger field of psychology is easily explained by Brewer’s (1991) optimal distinctiveness theory (ODT), which aims to explain why people seek out social groups as well as what role these groups play in the maintenance of a stable self-concept. According to this model, we are at once driven towards assimilation and differentiation. Therefore, although we need to be part of a larger social group, when that group becomes too large or undefined we search for a more defined group. For example, Brewer and Pickett (1999) found that, overall, membership in common groups (Ohio residents) was
rated as less important to the self-concept than membership in more distinctive groups (honor students). However, when participants were instructed to focus on times during which they felt excessively distinct from others, they rated the more distinct group membership as less important than those participants instructed to focus on times during which they felt excessively similar to others. Therefore, individuals constantly strive to maintain an optimal balance between distinctiveness from and similarity with others. One way in which the optimal distinctiveness model indicates one may increase differentiation is to make intra-group distinctions (for example, create subfields) by differentiating an overly inclusive group (for example, the field of psychology). Further, as this intra-group contrast is heightened, the assimilation into one’s ingroup increases (Brewer & Pickett, 1999).

One could say that the entire field of psychology, as broad as it is, is insufficient in providing adequate distinction to an individual member. The subfields, however, are large enough to provide a social and professional community but small enough to allow for distinction. As an example, the importance of distinction is easily seen by perusing the large amount of literature in counseling psychology devoted to maintaining its distinctiveness from clinical psychology (Fretz, 1982; McGuire, McGuire, Child & Fujioka, 1978; Watkins, 1983). As the clinical and counseling subfields, or any other subfields within psychology, become increasingly indistinct, individuals will be more susceptible to group polarization and protectionism (Brewer & Pickett, 1999). The condition of heightened distinction would seem most apparent to those psychologists working in academia and, therefore, one would predict more ingroup identification by those in this environment than those in an environment such as private practice or settings.
with frequent interdisciplinary interactions. Brewer and Pickett (1999) point out that events that bring large numbers of people together with the purpose of enhancing group identity actually result in less identification with the large group due to the need for distinctiveness that the experience invokes. Indeed, they mention the American Psychological Association conventions as an example!

**Self-Categorization Theory**

Self-categorization theory (SCT) arose as a means of explaining when individuals interact in a manner reflective of individual characteristics and when they interact reflecting group membership and is subsumed by the meta-theory of social identity theory, which is discussed more fully in the following section (Turner & Onorato, 1999). Identifying by one’s individual characteristics, or self-categories, that serve to define one as a unique individual and separate from other ingroup members was termed personal identity while identifying by group membership, or self-categories, that define one in terms of shared similarities with other ingroup members (and thus, as different from outgroup members) was termed social identity. On some occasions one’s personal identity is more salient, and at other times, one’s social identity is more salient. These may be thought of as individual and collective selves, respectively (Simon, 1999). For example, a particular person may sometimes think of herself as an African American female school psychologist from Delaware when her personal identity is more salient, but other times think of herself as a school psychologist, or psychologist, or woman, if a particular social identity is made salient. As one’s social identity comes to the forefront, one identifies more with and sees oneself more like the ingroup as individual attributes are momentarily ignored and a single social self-aspect is focused upon.
Self-categorization theory delineates the movement between these two senses of self, with both personal and social identity representing different levels of inclusiveness of self-categorization. In other words, one may identify by numerous self-categories, each of which varies in how inclusive it is of other self-categories. For example, school psychologist is less inclusive than psychologist, as all school psychologists are psychologists but not all psychologists are school psychologists. Because one’s personal identity represents oneself as a unique individual different from others, including other in-group members, personal identity is less inclusive than social identity (Turner, 1999). According to SCT, which identity is more salient at a given time partly depends on the accessibility of a particular self-category. Strong identification, positive valence and an ego-involving group result in greater accessibility and therefore higher degrees of saliency. Continuing the example, our African American female school psychologist from Delaware will be more likely to self-categorize based on her school psychologist identity if she identifies strongly with her subfield, feels positively about it and derives a sense of self from this social identification. As psychologists are professionals having spent a great deal of time, money and effort obtaining membership in their respective subfield, they are likely to strongly identify with and define themselves by the career they have chosen, as well as think positively of their chosen field.

Why psychologists would be unlikely to identify with psychology as a whole (i.e. think of themselves as a psychologist rather than a social psychologist) is explained by another determinant of identity salience, fit of category specifications. According to SCT, one will identify with the group with which one has the most similarities and least differences. Therefore, when among psychologists, a developmental psychologist is more
likely to identify as a developmental psychologist than as psychologist due to the higher
degree of shared similarity with developmental psychologists as compared to all
psychologists in general. However, among a group comprised of engineers, bankers, real
estate agents, elementary school teachers and other psychologists, that same psychologist
may identify as psychologist. As most psychologists spend a great deal of time among
other psychologists, the push would be towards identifying by subfield rather than the
entire field as a whole. However, for those that work in a more interdisciplinary setting,
we would expect identification as psychologist to be more prominent. Self-categorization
theory characterizes self-categories as fluid and flexible, with salient categories shifting
as contexts change. However, as our contexts, motives, expectations, values, beliefs, etc.
change little from day to day, particularly within the context of our jobs and careers, our
self-categories are likewise unlikely to change.

Summary

Additional support for identification by subgroups is provided by research
showing that identification with a numerical minority group is more salient, and thus
stronger, than identification with a numerical majority group (Ellemers, Kortekaas &
Ouwerkerk, 1999; McGuire, McGuire, Child & Fujioka, 1978; Simon, 1999). As
membership within a given subfield is necessarily smaller than membership in
psychology as a whole, being a group member of the subfield will be more salient.
Therefore, psychologists are likely to display stronger identification with their respective
subfields than with psychology as a whole. These findings support both optimal
distinctiveness theory’s basic premise that we have a motive for distinction and self-categorization’s premise that we identify at the level of inclusiveness that involves the group with which we have most in common.

The two models are very similar, with optimal distinctiveness theory like the self-categorization model in that differing social identities are invoked by different contextual factors. However, optimal distinctiveness theory differs in that it adds the motivational component of drive for distinctiveness to the cognitive component of self-categorization’s levels of inclusiveness (Brewer & Pickett, 1999). Ultimately, and germane to the present discussion, optimal distinctiveness theory and self-categorization theory make the same predictions: that psychologists are more likely to identify themselves by their subfield, although this may be less so for those working in a multidisciplinary setting. A large part of psychology’s richness lies in its diversity, and I am not suggesting that psychology should be smaller, or that there is anything inherently wrong with identification with subfields. However, it is important to make sure that this identification does not hinder the growth and development of the field, and thus the subfields, as a whole.
CHAPTER 3  
INDICATIONS FOR DIFFERING ATTITUDES

As the above discussion clearly suggests, psychologists are, on the whole, more likely to identify themselves by their subfield affiliation than as a psychologist in general. The question we turn to now is that of the effect of this preferential identification on attitudes and behaviors toward other subfields. If there is no effect of this identification, then it has no impact on the field. However, if effects due to identification by subfield do exist, it is important to understand what they are. Just as the literature suggests that psychologists are likely to identify by subfield, it also suggests that the identification will have an effect on attitudes toward other subfields. Ingroup and outgroup bias, social identity theory, and the professional socialization literature will each be discussed in turn as they relate to understanding how identification by subfield will affect attitudes. The limited research directly addressing attitudes among psychologists will also be reviewed.

Ingroup and Outgroup Bias

Brewer (1999) makes the point that humans are characterized by obligatory interdependence, which refers to the necessity of both giving and receiving resources, including information and aid, for long-term survival. Therefore, individuals must decide whom it is beneficial to share resources with, as this relationship extracts a cost in addition to providing a benefit. Ingroups provide a natural boundary for answering this
question. Brewer (1999) defines ingroups as “bounded communities of mutual trust and obligation that delimit mutual interdependence and cooperation” (p. 433). This identification, mutual trust and obligation can lead to ingroup bias, defined as the favoring of one’s self-identified ingroup over other groups to which one does not see oneself as belonging to, or outgroups, in evaluations and behavior (Tajfel & Turner, 1986). It is not difficult to see how subfields of psychology easily fall into the bounded communities whose shared resources cover the realms of research, training and practice. Respective subfields closely guard their territory, from research programs to clinical populations and activities. This, although providing short-term benefits to the respective subfields, serves to undermine the larger field of psychology itself, and therefore ultimately the subfields themselves. It is for this reason that it is important that we understand the results of any ingroup bias that exists among the various subfields.

Brewer (1999) outlines a number of factors that predispose ingroups to harboring enmity toward outgroups. Included among these are perceived threat, common values and social comparison, common goals, and power politics and these will each be discussed in turn as they relate to psychology and psychologists. Perceived threat to resources, whether the resources are physical or political and the threats actual or perceived, results in outgroup hostility. With subfields increasingly overlapping in areas of focus and domains of expertise, perceived threat is inevitable, and in a very basic sense, realistic. Another result of the increasingly blurred line between subfields is increasingly shared measures for comparison. As subfields start defining their worth based on measures that other subfields use, a competition for positive distinction results (as predicted by optimal distinctiveness theory), with each subfield competing for top position. Further fanning the
fire is an ultimate common goal, by the nature of being a part of psychology, all subfields share. Although sharing a common goal therefore requires some amount of interdependence among the fields, Brewer (1999) suggests that this actually serves to heighten hostility because of the basic mistrust that exists between groups. As long as ingroup boundaries are well-defined, an individual’s focus will remain on the ingroup and the “us.” However, as these boundaries become muddied, “they” suddenly become important. Therefore, we would expect more hostility towards those more similar to us. Finally, the political nature of the field, seen everywhere from academic departments on a local level to the American Psychological Association versus the American Psychological Society at the national level, intensifies preferences for ingroups and biases against outgroups.

Brewer (1999) further argues that cultures differentiated among a primary categorization, particularly a dichotomous distinction, experience increased hostility among ingroups and outgroups. The culture of psychology is such a culture and may be defined by the primary categorization of subfield (a common question when meeting another psychologist is “What area are you in?”). It could also be argued that psychology is also dichotomous, broken down into scientists versus practitioners. Silver and Brewer (1997), in examining group identities, found that college students easily identified with four or five “groups” and a great deal of variation existed between people on the groups identified. Extrapolating this finding to psychology suggests that psychologists might identify themselves on a number of dimensions in addition to those above, lessening ingroup bias. While this is certainly to be expected, it is unlikely to make a difference because identifying with psychology will limit group identification within that realm. For
example, it is likely that a psychologist may identify as, say, a man, a father, an Asian American and a social psychologist. However, in his work setting, when membership to the larger field of psychology is salient, his ingroup of social psychologists will come to the forefront, making other group memberships less relevant for that particular context. Therefore, at least for those identifying with psychology and their career, the end result is still the same: ingroup bias (toward one’s own subfield) at the expense of the outgroup (other subfields).

Brewer (1999) and others (Brown, 2000; Verkuyten, 2002) have recently questioned whether outgroup hostility is an inevitable outcome or whether ingroups may have an ingroup preference without outgroup derogation. In other words, ingroup bias is the presence of favoritism towards the ingroup and an absence of favoritism towards outgroups. This absence can be just that – an absence – and does not necessitate the presence of hostility. Therefore, the attitudes toward the other subfields need not necessarily be negative, though they may. However, they can be expected to be less favorable.

*Social Identity Theory*

Social identity theory (Turner, 1975) delineates what occurs as individuals become part of a group – primarily that the group becomes a source of social identity, or rather, one’s group membership defines an aspect of one’s self-concept. As such, group membership comes to contain an emotional significance (Tajfel & Turner, 1986; Turner & Onorato, 1999). This in turn leads to behavior and attitudes that favor one’s group (ingroup) over other groups (outgroups), particularly on relevant dimensions, in order to maintain a positive social identity (Brown, 2000; Tajfel & Turner, 1986). Thus, positive
social identity is a motivating force guiding behavior that is characterized by ingroup bias. It is important to note that identified membership is not dependent upon frequency of interaction with other members of the group (Tajfel & Turner, 1986), and therefore even those psychologists not interacting frequently with members of their identified subfield may still identify strongly with the subfield. The strategies that a particular group or individual will use to maintain a positive social identity varies as a function of the status of the group, group boundaries, intensity of ingroup identification and shared beliefs regarding the nature of the social system and group differences in status, power and wealth (Turner & Onorato, 1999).

Ellemers, Kortekaas and Ouwerkerk (1999) suggest that identification actually has three components: a cognitive component (self-categorization) that reflects one’s awareness of belonging to a social group, an evaluative component (group self-esteem) that reflects one’s positive or negative value connotation regarding belonging to a particular social group, and an emotional component (affective commitment) that reflects one’s sense of emotional involvement in the group. Further, they maintain that these components should be measured and considered separately, not aggregated into a one-dimensional construct, and that the identification traditionally discussed in terms of social identity theory is actually only the emotional component, or affective commitment, toward the group. Therefore, it is possible for some psychologists to be cognitively aware (self-categorization) of their membership in a particular subfield without necessarily subscribing to the attitudes and behaviors of that subfield, which is also independent from their positive and negative evaluations of belonging to their respective subfield and their feelings of involvement within the subfield. However, although being seen as distinct, as
group self-esteem increases (belonging to the group is seen as more attractive), affective commitment (degree of emotional involvement) often increases. As a psychologist’s emotional commitment to the subfield increases, his or her attitudes and behaviors will become increasingly aligned with his or her ingroup. As a psychologist generally chooses which subfield he or she will enter, it is natural to assume that the chosen subfield was/is an attractive one. Because there is positive group or subfield self-esteem, one would expect affective commitment to be high and psychologists within a subfield to share attitudes and behaviors. Therefore, we would expect the postulates of social identity theory to fit.

Social identity theory proposes that self-esteem results in ingroup favoritism and outgroup derogation with the motivation of achieving and maintaining personal self-esteem, or a positive personal identity (Tajfel, 1982). In the former case, in order to maintain a positive self-image, individuals will view their ingroup in the best possible light (Cadinu & Cerchioni, 2000; Reichl, 1997). In the latter case, the ingroup, in response to a social comparison resulting in an identity threat, will derogate the source of threat or another lower status or stereotyped outgroup in order to restore and/or elevate self-esteem (Cadinu & Reggiorni, 2002). Fein and Spencer (1997) found this to be true even in the absence of direct comparison of ingroup and outgroup, as self-image restoration, in response to self-directed (versus ingroup directed) threats, occurred by stereotyping an outgroup member. Biased intergroup evaluations are the most common forms of ingroup favoritism used in order to maintain positive distinctiveness (Brown, 2000).
According to social identity theory, ingroup bias becomes stronger as the outgroup becomes more similar to the ingroup, as this results in an increase of identity threat (this is congruent with ODTs assertion that ingroup bias increases when there is a threat to resources because of a need for distinction from the increased overlap). It is not difficult to see increasing overlap between subfields as research domains and activity and setting focuses become increasingly similar. For example, a literature search on “decision making” resulted in articles from a wide range of journals, including the Journal of Economic Psychology, Neuroscience, Journal of Career Assessment, Journal of Counseling Psychology and Personality and Individual Differences. A search on “attitude formation” resulted in publications in Applied Social Psychology, Developmental Psychology, Journal of Counseling Psychology, and Cognition and Emotion. In the practice realm, there is now little to distinguish between the clinical populations and settings of clinical and counseling psychologists and many states do not distinguish between the applied areas of psychology in terms of licensure and what activities they may do. It is also not difficult to see how this overlap between subfields might lead subfields to feel threatened of loosing “their” identity. Other theories, such as the downward comparison theory (Wills, 1981), suggest that ingroup bias is focused not on similar groups but on lower-status groups. Without objective measures of “status” between subfields, any one given subfield is capable of viewing an alternate subfield as lower in status. Therefore, given this, and that all subfields show some similarity to others because they are all “psychology,” either motivator is available. And regardless of whether the motivating factor for derogation is similarity or lower status, the result is the
same: derogation of an outgroup. Whether a subfield derogates another subfield they perceive to be of lower status or a field they see as similar, the end result is negative attitudes toward another subfield of psychology. Given that some subfields are, by the nature of their activities and focus, more similar than others, we might expect those subfields to derogate each other more.

Distinctions have been made between individual versus collective self-esteem. Branscombe and Wann (1994) suggest that collective self-esteem, belief in the quality or the worth of the group to which one belongs, is a more accurate measure of esteem-related processes between groups. They used this measure in examining the effect of identification with one’s group in determining whether these self-esteem processes were manifested in a given individual. They claimed that self-esteem maintenance through the derogation of outgroups is more likely for those individuals identifying more strongly as members of their ingroup, as it serves as a self-protective defense of their social identity against threats. They found that collective self-esteem was lowered by threat to the identity of the group to which subjects strongly identified. For those not strongly identified with the group, collective self-esteem was not affected by threat. Similar results for derogation were found, with high identifiers engaging in more derogation of outgroup in the face of threat than low identifiers. This derogation served to enhance self-esteem, although this was limited to derogation of the relevant out-group. This suggests that members of subfields perceiving an identity threat from other subfields will engage in derogation of that subfield as a means of increasing their collective self-esteem. Derogation extended to irrelevant others in their study actually decreased self-esteem.
Again, then, we see a prediction of negative attitudes toward other subfields, particularly those similar to one’s own subfield, with those that strongly identify with their subfield most likely to display this pattern, as well as support for a focus on comparisons with other areas of psychology instead of other mental health fields (which would be more irrelevant).

In addition to the role of identification in ingroup bias, recent research has also suggested that self-stereotyping also plays a role in predicting ingroup bias (Verkuyten & Nekuee, 1999). Self-stereotyping refers to the degree to which one views characteristics of one’s ingroup as characteristic of oneself, and would be expected to be present among those that are high identifiers (Brewer & Pickett, 1999). Those psychologists that align themselves with characteristics of their subfield may be more likely to engage in ingroup bias. This is congruent with SCT in that as one increasingly self-stereotypes (adopts characteristics of the group), one’s social identity (ingroup membership) becomes more salient.

A logical question that arises is why psychologists would compare themselves to another subfield rather than another mental health profession. Social identity theory asserts that comparisons are made to outgroups that are seen as a relevant comparison group, with similarity, proximity and situational salience determining comparative outgroups (Tafjel & Turner, 1986). It is likely that psychologists, due to the nature of similar training and belonging to the same profession, will see one another as a more relevant comparison group. However, this might be expected to be less true for subfields
that are less similar, such as experimental and school psychology, or in situations where other subfields are less salient than other professional groups, as in a community mental health agency.

*Professional Socialization*

Although much of the literature cited thus far originates in the social psychology literature, suggestions of differing attitudes is also suggested through another line of research, that on professional socialization and professional identity development. As attitudes toward one’s profession are not innate, they must be learned. A good portion of this socialization occurs in the educational setting where one is first exposed to one’s field by faculty and other established members of the profession (Enoch, 1989). Faculty members serve as mentors, helping students understand unwritten rules, politics and norms as students internalize values, ideals and attitudes of their chosen field of study (Lerner, 1998; Wright & Wright, 1987). Socialization is then continued in the beginning years of one’s professional career as one enters one’s field as a full member (Enoch, 1989).

Ashforth, Saks and Lee (1998) identify tactics that organizations use to socialize its members. Organizations can fall somewhere on each of six bipolar continuums representing six different tactics. Collective socialization is a tactic that groups newcomers together, putting them through common experiences, versus individualistic socialization, where each newcomer has a unique experience. The second dimension is determined by whether a newcomer is segregated from experienced members (formal) versus not clearly distinguished from established members (informal). In sequential tactics, there is a set of progressive steps to take to assume the role, versus random
tactics, where the steps are ambiguous or non-constant. Fixed (versus variable) socialization has a timetable for accomplishments and assumption of the role, whereas variable does not. A serial process of socialization is one in which the newcomer is socialized by an experienced member, whereas in a disjunctive process a role model is not used. The sixth dimension refers to whether the identity and attributes of the newcomer are affirmed (investiture) or stripped away (divestiture). Utilizing collective, formal, sequential, fixed and serial tactics is referred to as institutionalized socialization. Institutionalized socialization has been found to encourage the acceptance of established roles and values and increase organizational commitment and identification. While smoothing the transition into the profession and reducing uncertainty, these tactics also encourage conformity over innovation, reproducing the status quo and exerting more control over newcomers’ attitudes and behaviors. It is easy to see that the graduate school process follows these tactics. There is a fairly set timetable and progression for obtaining one’s degree (i.e. candidacy exams, dissertation), making the process sequential and fixed. The process is serial in that graduate students have advisors or major professors that take responsibility in guiding them through their program. Every cohort goes through the same experiences with the same requirements, making it collective, and there is a clear differentiation between student and faculty, a formal attribute. Therefore, we would expect to see an increase in ingroup attitudes in graduate students over the course of their training as they are socialized into their profession. As has already been discussed, the ingroup is likely to be the subfield to which one belongs, and not psychology as a whole.

Additionally, in some respects faculty serve in a parental capacity for graduate students and research has shown that attitudes towards others are transmitted from
parents to offspring. For example, Verkuyten (2002) found that children’s evaluations of their own ethnic group and the presence of ingroup bias were related to ethnic identification and to parents’ attitudes. Children with higher identification displayed more positive attitudes toward the ingroup as well as more ingroup bias and attitudes that corresponded to parental attitudes. Similarity in attitudes reflected not only evaluations regarding the ingroup but also other ethnic groups (outgroups). Results suggested that these were not merely projections onto the parents by the children but attitude transmissions by the parents. Unfortunately, identification was measured through terms such as “I often regret being Turkish,” “I feel good about being Turkish,” “It is important to me that I am Turkish,” etc. Therefore, their identification measure included not just self-categorization but also an evaluative component of that identification as well and it is not possible to tell if these differing components are related differentially to ingroup attitudes. While faculty are not parents, they do serve in an authority position, enforcing rules and norms, and students often desire to live up to the expectations of faculty, echoing characteristics of child-parent relationships.

Development of a professional identity through professional socialization is usually viewed in a positive light by organizations and professions. However, when it precludes identification with the entire field of psychology and results in less favorable attitudes towards other areas of psychology, the outcome may be harmful to the field.

Summary

The above literature, while not specific to psychology, does seem to suggest that because psychologists are likely to identify by subfield, are also likely to hold attitudes reflecting their identification with particular subfield ingroups. The research on ingroup
bias and social identity theory both predict that these attitudes are likely to reflect, at the very least, favoritism of the ingroup over the outgroup, and perhaps even derogation of the outgroup. This favoritism results from shared resources with the ingroup and a motivation to maintain a positive identity in comparison with similar outgroups on common values and goals, particularly for those psychologists whose subfield identity is more salient. Further, socialization processes during graduate school and one’s early professional life encourage the adoption of ingroup values and attitudes. The attitudes graduate students learn throughout their training, whether from faculty or their own experiences, continue with them into their career. That these attitudes are adopted and maintained can be seen in an article by Stabb (1992) on the experiences of a new professional in the field where she expresses concern over the difficulty maintaining a subfield identity (in this case as a counseling psychologist) within academia. She talks of the struggle preserving an allegiance to her subfield in the face of conflicts with other fields or general psychology. Mintz (1992), in a similar article, discusses the problem of losing members to “other” subfields and points out that identification with one’s subfield is an encouraged aspect of a position within academia. But what of the research specifically addressing the attitudes of psychologists toward other psychologists? Does it follow the predictions of the theoretical literature just reviewed?

Past Research

Previous research on psychologists’ views of other psychologists is scarce. After perusing the literature, only one study was found that directly examined the question of how psychologists view other psychologists. Hartnett, Simonetta and Mahoney (1989) examined the views of non-clinical psychologists toward clinical psychologists and
clinical psychology. Counseling psychologists were not included with clinical psychologists (due to their increasing overlap) and non-clinical psychologists were any members of the APA Directory that identified with any area other than clinical or counseling psychology. Represented areas included experimental, industrial-organizational, educational, developmental, social, cognition, school, physiological, measurement and other. Results indicated that there were no differences across place of employment or specialty. Forty-seven percent were willing to recommend a clinical psychologist they knew to a stranger but this number dropped to 25% of the sample that would actually see a clinical psychologist themselves. Twenty-eight percent would recommend a clinical psychologist to a close family member, 33% to a close friend, 36% to a colleague and 42% to an acquaintance. The typical clinician was seen as stable and empathic but slightly pompous, and the authors concluded this was a slightly favorable attitude. Although most respondents indicated that psychotherapy was effective, 35% were undecided or believed it to be ineffective. Forty-percent were either undecided or agreed that an individual without clinical training but with good interpersonal skills would be as effective as the average clinical psychologist. Although attitudes were judged to be slightly favorable based on responses, it is clear that “slightly favorable” translates into a hesitancy to actually utilize or recommend a clinical psychologist and a large percentage failed to see the core of what clinical psychologists do to be effective, and therefore, it can be concluded that many of the participants viewed clinical psychologist’s activities to be, at best, a waste of time. From this research we do not know what other behavioral domains the attitudes might affect, more detailed knowledge on the attitudes specifically, whether variation among subfields exists or whether they
viewed the clinical psychologists as good psychologists. But it does suggest that subfields do hold attitudes toward other subfields, these attitudes are not entirely favorable and that these attitudes do have some impact on behavior.
That the varying subfields of psychology might have differing attitudes is of little consequence if those attitudes do not result in an outcome. In other words, in the absence of any influence on behavior, they may be of interest but not of any practical importance. However, just as past research leads to the deduction that these differing attitudes are likely to exist, past research also suggests that these attitudes are likely to have an influence on behavior, and are, therefore, worthy of study. Both theoretical and empirical support for this is discussed.

Theoretical Support

Various theoretical musings regarding the exact nature of the relationship between ingroups and outgroups exist in the literature (Brewer, 1999). From a structural-functional vantage point, numerous theorists have argued for the primacy of the role of resource availability and group goals, with ingroups and outgroups pursuing similar resources or goals taking an “us” versus “them” attitude resulting in a competitive relationship spurred by negative interactions. For example, realistic group conflict theory posits that groups are motivated to behave in ways that maximize resource attainment and groups experience conflict when in competition for resources, with resources referring
not only to monetary resources but also to power and prestige (Tajfel & Turner, 1986; Tyler, Kramer & John, 1999). Not only does this competition create hostility between groups, but it also fosters a sense of cohesiveness within the ingroup. Therefore, one behaves in ways that are hostile toward the group threatening the ingroup’s resource attainment, and engages in cooperative behavior with members of one’s ingroup.

Others have suggested that ingroup preference and the perception of categorization alone is sufficient for outgroup derogation (Tajfel & Turner, 1986). For example, Turner and Onorato (1999) claim that as social identity increases, depersonalization increases, resulting in ingroup behavior. Thus, in this manner, group formation determines attitudes and behaviors. These behaviors include accepting influence from ingroup members while rejecting influence from outgroup members. It seems likely that resource attainment serves as a factor in subfield relations, given the current economic climate and the reality of increasingly tight fiscal resources. After all, the viability of a subfield depends on its ability to attract and train capable new members and produce novel research and innovations. These activities require money, along with providing power and prestige. Therefore, with both categorization and resource competition salient, it is likely to expect attitudes and behaviors to be influenced by ingroup, or subfield, identification.

What exact behavior this would translate into is speculative. However, we would expect instances involving resources to be particularly susceptible to ingroup bias. For example, client referrals, a source of income, may be more likely to go to those belonging to one’s own subfield. Faculty appointments would likewise go to those within one’s own subfield, likely without even considering qualified applicants from outside of the area.
Research and publication collaborations, which potentially lead to monetary gain and prestige, are more likely to be with those within one's subfield. Potential opportunities for jobs, training experiences, grants, scholarships, fellowships and the like are more likely to be disseminated among one's own subfield. Graduate students taking courses with students in other areas are more likely to form study groups, collaborate on projects and share information with those in one’s own area. These are but a few possible examples of types of behaviors that might result from preferential attitudes towards one’s own subfield.

Leone, Perugini and Ercolani (1999) found two models demonstrated predictive validity in relating attitudes to behavior, the theory of planned behavior (TPB) (Ajzen & Madden, 1986) and the theory of self-regulation (TSR) (Bagozzi, 1992). TPB proposes that attitudes, along with subjective norms and perceived behavioral control, influence intentions, which then direct behavior. TSR proposes that attitudes feed into desire, which then forms intention, resulting in behavior. In other words, attitudes influence our desires, which shape our intentions, which then form our behaviors. Subjective norms also feed into intentions and so also have an influence on behavior. Which model is correct, whether attitudes influence our intentions through motivated desires as TSR proposes or not, is irrelevant for the current discussion. It is enough that attitudes influence behaviors. However, it is interesting to speculate on how these models might explain behaviors in psychologists. For example, in considering TSR, a graduate student might not have developed unfavorable attitudes toward another subfield. However, he might believe that it is important to please his advisor or other faculty members in his area. This attitude leads to the desire to be looked upon favorably by them, which then
leads to the intention of engaging in behaviors he sees them as supporting. If he discerns attitudes or behaviors on their part that indicate less favorable opinions of other areas, he may then emulate that or similar behavior.

Brown (2000) suggests additional examples of possible behavioral implications and claims that biased intergroup evaluations are the most common forms of ingroup favoritism and are used to maintain positive distinctiveness. Certainly this might take the form of biased attitudinal judgments among psychologists regarding outgroup member’s competence, professionalism, importance to psychology, etc. Although not necessarily conscious, behaviorally this might manifest as more weight given to and incorporation of ingroup conducted research or preferential treatment/better grades given to students belonging to one’s ingroup, as examples.

**Empirical Support**

In the empirical realm, researchers have found that attitudes affect perceptions of performance (Lord, Ross & Lepper, 1979). For example, Fazio and Williams (1986), in examining attitudes toward presidential candidates and judgments of performance during a debate, found that favorable attitudes held prior to viewing the debate predicted favorable performance ratings and voting behavior three months later. In addition, the attitudes held toward the presidential candidate were transferred over to the vice-presidential candidates and their performance. This effect was stronger when judging performances in which there was no clear “winner.” When judging the performance of another psychologist, whether in the domain of treatment, research acumen, job performance, academic work, etc., it is rarely clear whether that individual is a “winner.” Instead, we rely more on our subjective perceptions of that individual’s performance. If
our attitudes favor our own particular subfield, then we are likely to judge the performance of others in our subfield more favorably than the performance of those outside our subfield. This may lead to preferential selection and promotion of those in our own subfield, despite other qualified, or more qualified, psychologists. Note, too, that the act of voting is a behavior that is usually given a great deal of thought and deliberation. Therefore, it is not only snap decisions that are affected by attitudes and, as is also suggested by this research, these attitudes persist over time.

Ingroup identification has also been shown to influence how criticism is received. Hornsey, Oppes and Svensson (2002) found that while criticism received from the ingroup was accepted, the same criticism given by a member of the outgroup was not. Criticism from the outgroup member was judged as being less fair and less positive and the outgroup member was seen as a less attractive proposition for friendship. The greater comfort in receiving criticism from an ingroup member was termed the intergroup sensitivity effect. If an outgroup member offered positive feedback, he or she was rated just as favorable as ingroup members making the same comment. Ingroup comments were seen as more legitimate, more constructive and evoked less sensitivity on the part of the person being criticized. This phenomenon seems to be mediated by the perception of a destructive motive on part of the outgroup criticizer and a view that outgroup members are not qualified to make judgments about ingroup members. This suggests the psychologists may discount valid and accurate feedback from others by the very nature of their subfield affiliation.

Mullen, Brown and Smith (1992) found identification with a group leads to a tendency to favor one’s ingroup in resource allocation and group-enhancing judgments.
Ellemers, Kortekaas and Ouwerkerk (1999) found that participants displaying high group commitment generally allocated more points to their ingroup than the outgroup, despite the possibility of allocating equal amounts of points. Holland, Verplanken and Van Knippenberg (2000) found that strong attitudes toward Greenpeace had an impact on behavior, with participants holding strong attitudes more likely to donate money, and that their attitudes were stable over time. Pomerantz, Chaiken and Tordesillas (1995) found attitude strength to be predictive of intentions to engage in a number of behaviors, including writing letters, donating money, seeking more information, joining organizations, attending political meetings, engaging in debates and signing petitions. Other studies have found similar relationships between attitude strength and behavior or intentions to perform behaviors (Fazio & Zanna, 1978; Jaccard & Becker, 1985; Petersen & Dutton, 1975).

This leads to a speculation on graduate students’ attitudes and behavior in particular. With the exception of an instance discussed below, there is no reason to believe a beginning graduate student would have any developed attitude towards various subfields, as few beginning graduate students possess much knowledge of other subfields beyond a basic understanding of superficial differences leading to the conclusion that that particular area of concentration is not a good match for his or her career goals. If graduate students have no particular attitude toward other subfields, then those graduate students are going to be influenced by the behaviors they engage in. Further, if as discussed previously, graduate students are motivated by a desire to please faculty members, they will engage in behaviors consistent with faculty attitudes. Assuming the faculty have attitudes favoring their own subfield and view other subfields less positively, then the
graduate students will, through engaging in these behaviors, make these attitudes their own as they infer them from their behavior. In this way, faculty attitudes not only influence their own behavior, but also the attitude formation of their graduate students. Faculty attitudes may also influence students at the undergraduate level, particularly those (or any other psychologist with whom the student is close) serving as a mentor to a particular student. In this instance, the undergraduate student would enter graduate school with attitudes toward other subfields formed much in the same manner as discussed for graduate students.

**Summary**

Identification by subfield is not only predictive of differing attitudes as argued in the previous section, but is also predictive of behaviors reflecting those attitudes. This claim is supported by a number of theoretical assertions, such as those by realistic group conflict theory, the theory of planned behavior and social identity theory, as well as by empirical studies. Although the exact nature of the manifested behaviors in the realm of psychologists and their attitudes and behaviors toward other psychologists is unknown, that behaviors are impacted seems undeniable.
CHAPTER 5
A MODEL RELATING SUBFIELD ATTITUDE TO BEHAVIOR

Based on the literature discussed above, the following model relating one’s attitude towards other subfields and behavior towards that respective subfield is proposed (See Figure 1). Note that the model is referring to behavior towards a specific other subfield and not to other subfields in general.

One’s attitude toward another subfield is influenced by numerous factors. These factors are a combination of both general internal ingroup and outgroup evaluations as well as factors more specific to various outgroups. More generally, one’s attitude toward a specific outgroup subfield is influenced by an individual’s own ingroup affect and ingroup self-categorization. Self-categorization is a cognitive-oriented variable composed of strength of subfield (or ingroup) identification and the degree to which one self-stereotypes as a typical member of one’s subfield. The greater degree to which one self-stereotypes and the greater the strength of one’s subfield identification, the more cognitively an individual is invested in the ingroup and, therefore, the less positive one’s attitudes toward other subfields will be compared to attitudes towards one’s own subfield.

Ingroup affect is an affect-oriented variable composed of affective commitment to one’s subfield (ingroup) and one’s subfield (ingroup) self-esteem. Affective commitment represents the degree to which an individual feels a sense of emotional involvement in the
ingroup subfield. Ingroup self-esteem is the positive or negative value connotation regarding belonging to a particular social group and represents a collective self-esteem measure of the quality or the worth of the ingroup. The more affective commitment one has in one’s own subfield membership and the higher one’s ingroup self-esteem, the stronger one’s ingroup affect and, therefore, the less positive one’s views of other subfields (outgroups) compared to attitudes regarding one’s ingroup.

Figure 1. Nomological Model Relating Other Subfield Attitude to Behavior
More specifically to particular outgroup subfields, the more negative faculty or mentor attitudes towards a specific outgroup subfield, the more negative the graduate students’ attitudes toward that particular subfield. Additionally, the larger the threat one perceives another outgroup subfield to be to one’s own subfield’s resources, whether physical or otherwise, the less positive one’s attitude will be toward that particular subfield. While this threat may take various forms, the degree to which one’s subfield overlaps with an outgroup subfield with respect to measures of comparison is likely to be particularly threatening, as more overlap will lead to more competition for distinction and, therefore, less positive attitudes toward that group. These outgroup subfield specific factors combine with the more general individual ingroup factors discussed above to form one’s attitude toward a particular subfield. This attitude than results in behaviors reflecting the attitude.

This model in no way assumes to be representative of all of the factors that go forming the attitudes that a psychologist holds of another psychologist or in relating those attitudes to behavior. It is merely an initial formulation based on suggestions from the literature. For this reason, a direct test of the model itself is not a focus of the present research. Rather, the present study will focus on examining the more general premise of differential attitudes as well as individual components theorized to contribute to these attitudes.
CHAPTER 6
SUMMARY AND HYPOTHESES

In applying these various theories and proposed relationships between attitudes and behaviors to psychologists and psychologists-in-training, it matters little which theory is “correct.” There are multiple theoretical reasons to expect attitude differences. For the purposes of the present study, it is enough to know that, as social beings, we are drawn to groups for our identities and a sense of a meaningful existence and that attitudes do have an influence on our behaviors. Although a handful of studies have examined these issues, a large-scale exploration of the matter has yet to be done. However, if we are to truly be successful in advancing not only “the public” view of the viability of our field but also the viability of our field itself, we must. It is time that we examined ourselves.

Based on the model, literature and research findings discussed above, the following hypotheses are proposed:

1. Psychologists will display less favorable attitudes toward other subfields (outgroups) than towards their own identified subfield (ingroup).

2. Psychologists that more strongly self-categorize (that is, those that self-stereotype with their own subfield and those that identify more strongly with
their own subfield) will be more likely to have less favorable attitudes toward members of other subfields than those that do not.

3. The more positive one’s ingroup affect (that is, the more affective commitment one has to one’s own subfield and the higher one’s subfield self-esteem) the less favorable one’s attitudes will be towards members of other subfields.

4. The greater the threat one perceives from another (outgroup) subfield in relation to one’s own subfield (ingroup), the less favorable one’s attitudes toward that other subfield will be.

5. Graduate students’ perception of faculty attitudes will predict graduate student attitudes.

6. Time within the field of psychology will correlate positively with favorable attitudes towards one’s own subfield.

7. A psychologist’s attitudes toward another subfield will influence his or her behavior regarding that particular subfield.
CHAPTER 7

METHOD

Procedure

The present study focused on the attitudes of graduate students, as they are the future of the field. This next generation represents the advocates for psychology; it is important to understand exactly what they will be advocating (Chamberlin, 2001). As faculty members have a direct influence on the professional development of graduate students and serve as a possible source of graduate student attitudes, they were also a focus of the present study. In addition to their respective impact on the future of the field, graduate students and faculty members are likely to be the psychologists most immersed in and identified with the field of psychology. Any differential attitudes and resulting effects that exist would most likely be found in academia and, therefore, this population is logically an appropriate starting point.

Solicitation letters (see Appendix A) were sent to the department chairs of 299 psychology graduate and undergraduate training programs across the United States via the Internet. No incentive was provided for participation. Interested participants were directed to an internet site were they completed a questionnaire created for the purposes of the present study (either a faculty or graduate student version) that took approximately 30 minutes. See Appendices B, C and D for a copy of the instructions and survey given to
participants. All graduate students or faculty members in the field of psychology over the age of 18 were invited to participate, regardless of subfield affiliation. While there is no way to ensure that participants are indeed psychologists, it is unlikely that someone outside of the field would be motivated to take the time to complete the survey. Although members of any subfield were invited to participate, the present study focused only on their attitudes and behaviors regarding their own subfield and those directed toward clinical, counseling, social and cognitive/experimental psychologists. The subfields examined were limited in order to decrease the length of the survey completion time and were chosen to reflect both traditionally research and practice oriented areas as well as areas that share some overlap. It was not necessary that participants have exposure to members of these areas to participate, as it was the attitudes participants hold of the areas that were of interest and not whether these perceptions were formed through actual experience.

**Participants**

From an initial response of 346, 10 participants did not complete the survey and 16 others were not usable due to problems with downloading the data, resulting in a final $N$ of 320. Eighty-six of the participants were faculty members and 234 graduate students with 30.6% of the total sample male and 69.1% female. Gender breakdown within the graduate student was 25.6% male and 73.9% female, similar to that reported. Within the faculty sample, 44.2% were male and 55.8% female. According to the 2000 Graduate Study in Psychology (APA Research Office), the percentage of female faculty in departments of psychology in the Unites States is 39.49% and males 60.51% (includes both full and part time faculty). The same survey found that among 1st year full-time
doctoral level students, 30% were men and 70% women. The mean age for the entire sample was 32.0, with a range from 21 to 70. Graduate student and faculty mean age was 27.8 (ranging from 21 to 53) and 43.3 (ranging from 30 to 70), respectively. Time within the field of psychology ranged from 1 to 50 years with a mean of 7.51, with the mean time in the field for faculty 18.6 years (ranging from 5 to 50) and for graduate students 3.4 years (ranging from 1 to 9). European-Americans comprised the majority of the respondents at 86.3%. African Americans and Asian Americans comprised 3.4% each, Hispanic and Native Americans 2.2% each, Biracial 1.3% and those identifying as Other .9%. The majority of the respondents either have or are working towards a Ph.D. (91.6%) followed by a Psy.D. (4.7%). Master level degree seekers (no faculty participants held an M.A.) represented 1.9% and Ed.D.s 0.3%. Those seeking other degrees represented 1.3%. Most faculty received their degree from a psychology department (75.6%), followed by a department devoted to a specific area of psychology (7.0%), human development (7.0%), a science (2.3%), animal behavior (2.3%), counseling (1.2%), psychiatry (1.2%), psychology and a related field (1.2%) and other (1.2%).

See Figure 2 for combined percentages of participants identifying as members of the various psychology subfields, as well as for graduate students and faculty separately. Faculty percentages are listed both for subfield identification at the time they received their degree and for current identification. Of the faculty, 22.1% changed their subfield affiliation since receiving their degree. Three switched each to clinical (from school, quantitative and counseling), developmental (from educational, cognitive/experimental and other), health (from cognitive/experimental, clinical and other) and
psychobiology/neuropsychology (from clinical, developmental and other), two each to counseling (from clinical and school), social (from developmental and educational) and other (from clinical and developmental) and one to quantitative (from developmental). According to the APA Research office (2001), the percentages of Ph.D. degrees by subfield in 2001 were as follows: clinical (35%), cognitive/experimental (8%), social (4%), developmental (7%), psychobiology/neuropsychology (5%), counseling (12%), industrial/organizational (5%), health (3%), school (4%), educational (3%), quantitative (<1%) and other (13%). The activities and work settings (actual for faculty and anticipated for graduate students) are presented in Appendix E.

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Combined (current)</th>
<th>Graduate Students</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>At Time of Degree</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>Clinical</td>
<td>35.0</td>
<td>39.7</td>
<td>25.6</td>
</tr>
<tr>
<td>Cognitive/Experimental</td>
<td>12.5</td>
<td>11.5</td>
<td>18.6</td>
</tr>
<tr>
<td>Social</td>
<td>12.5</td>
<td>13.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Developmental</td>
<td>10.0</td>
<td>9.8</td>
<td>15.1</td>
</tr>
<tr>
<td>Psychobiology/Neuropsych</td>
<td>6.6</td>
<td>5.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Counseling</td>
<td>6.3</td>
<td>5.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Industrial/Organizational</td>
<td>4.4</td>
<td>4.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Health</td>
<td>2.2</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>School</td>
<td>2.2</td>
<td>1.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Educational</td>
<td>1.6</td>
<td>2.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Quantitative</td>
<td>0.1</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Other</td>
<td>5.3</td>
<td>5.6</td>
<td>5.8</td>
</tr>
</tbody>
</table>

*Figure 2. Subfield Identification by Percentage*

Participants hailed from 59 institutions representing 29 states, with 2 institutions from Canada. Twenty-one percent of these have an overall student population between
20,000 and 25,000. This is followed by 15,000-19,999 (17.4%), 10,000-14,999 and less than 5000 (each 15.1%), 5,000 – 9,999 (11.6%), 25,000-29,999 (8.1%), more than 40,000 (7.0%) and 30,000-34,999 (3.5%). Regarding the institutional units in which participants are housed, the majority of respondents are housed in a psychology department (85.6%) followed by departments of education (10.0%), units housing psychology and a related field (2.8%) and then by units of science, counseling and arts (each less than 1%). The number of faculty within the units ranged from 3 to 300 with a mean of 31.4. Of the faculty respondents, 38.4% are Assistant Professors, 31.4% Full Professors, 18.6% Associate Professors, 7.0% Instructors, 2.3% Professor Emeritus and 2.3% Adjunct. Concerning whether specific subfields were present in participant’s departments, 50.0% contained a clinical, 13.1% a counseling, 60.9% a cognitive/experimental, 44.7% a developmental, 17.2% a quantitative, 7.5% an educational, 10.6% a health, 41.9% a psychobio/neuropsychology, 12.5% a school, 48.1% a social, 26.6% an industrial/organizational and 30.3% an “other” psychology program. Fifty-five percent of the departments contained a discipline other than psychology, with the number of other disciplines ranging from 1 to 13. Separating graduate students and faculty, 69.8% of faculty reported being a department containing a discipline outside of psychology and 50% of graduate students reported the same. This discrepancy is likely due to the high number of faculty from smaller liberal arts schools, which are more likely to combine disciplines in departments.
Variable Measurement

As stated above, a questionnaire was created for the purposes of the present study. In addition to the demographic and descriptive information presented above, the following variables were assessed:

Subfield self-esteem. Recall that subfield self-esteem reflects one’s positive or negative value connotation regarding one’s subfield. Subfield self-esteem was measured by averaging participant responses on three Likert items: (a) “I think my subfield has little to be proud of,” (b) “I feel good about my subfield,” and (c) “I have little respect for my subfield.” These items were rated on a scale from 1 (strongly disagree) to 7 (strongly agree) with the first and third items reverse scored. These items were taken from Ellemers, Kortekaas and Ouwerkerk’s (1999) previously mentioned research on factors contributing to identification. According to the authors, these items measured group self-esteem. Cronbach’s alpha for the items in the current study was .60; however, removing the item “I think my subfield has little to be proud of” increased the alpha level to .66 and so only the latter two items were aggregated and used in analyses. The mean for the subfield self-esteem scale was 6.2 with a standard deviation of .98.

Affective commitment. Affective commitment reflects one’s sense of emotional involvement in one’s subfield and was measured by averaging participant responses on three Likert items: (a) “I would rather not tell others that I belong to my subfield,” (b) “I would like to continue to be identified with my subfield” and (b) “I dislike being a member of my subfield.” These items were rated on a scale from 1 (strongly disagree) to 7 (strongly agree) with the first and third items reverse scored. These items were also taken from Ellemers, Kortekaas and Ouwerkerk’s (1999) research as a measure of
commitment to one’s group. Cronbach’s alpha for the items in the current study was .71. The aggregated score had a mean of 6.34 and a standard deviation of .92.

*Perceived mentor attitude.* Perceived mentor attitude was assessed through the following item: “In general, how important do you believe your faculty members or mentors believe each of the following subfields are to the field of psychology as a whole?” Participants answered using a Likert-scale ranging from 1 (*not at all important*) to 7 (*extremely important*) and completed the item for clinical, counseling, social and cognitive/experimental psychology as well as for their own subfield. This item was only included on the graduate student version. The means and standard deviations were as follows: clinical (*M* = 5.88; *SD* = 1.50), counseling (*M* = 4.45; *SD* = 1.88), social (*M* = 5.47; *SD* = 1.45), cognitive/experimental (*M* = 5.88; *SD* = 1.31), and own (*M* = 6.36; *SD* = 1.17).

*Self-stereotyping.* Self-stereotyping refers to the degree which an individual sees her or himself as a typical member of her or his ingroup. In order to assess the degree of self-stereotyping participants were asked to indicate whether they and typical members of their subfield engaged in a number of activities falling under the following domains: assessment, research, supervision, teaching/training, administration, consultation, writing/editing, clinical work/treatment/interventions and focus of clinical work/treatment/interventions. In addition, they were asked to indicate work settings for both themselves and typical members of their subfield. Faculty answered for current activities and settings while graduate students answered for activities and settings they envision themselves doing or working in. See Appendix C for a list of the specific activities that fell under each domain. A self-stereotyping score was obtained by counting
the number of matches for each participant; that is, the number of times an individual indicated either that both he or she engages in an activity/works in a setting that he or she sees a typical member of their subfield engaging/working in or that he or she does not engage in an activity/work in a setting that he or she also does not think a typical member of their subfield engages/works in. A percentage of the total possible matches was then computed, resulting in a similarity score representing the degree of self-stereotyping.

Additionally, a Likert-scale item, “I am like other members of my subfield,” with response options ranging from 1 (strongly disagree) to 7 (strongly agree), also ascertained the degree to which participants self-stereotyped. These two scores were significantly correlated ($r = .14; p < .01$). Because the similarity score computed from the self and typical member ratings provides more information, this score was used in analyses. The percentage of congruence ranged from 7.32% to 97.56% ($M = 69.57\%$ and $SD = 15.51$).

**Perceived threat.** Perceived threat was measured in terms of perceived overlapping competence in various professional activities. Competency in professional activities was chosen as a focus and representation of threat because it seems logical that individuals are likely to see encroachments on aspects of one’s career activities as threatening one’s resources, particularly when those activities are done competently by others, and the literature has shown resources to impact and activate ingroup bias. Threat was not assessed directly (for example, by asking how threatened participants are by members of another subfield) in order to prevent response biases. Competence was measured using Likert-ratings ranging from 1 (not at all competent) to 7 (completely competent) for each of the four subfields of interest (clinical, counseling, social,
cognitive/experimental), as well as for each participant’s own subfield, for different activity domains. The stem was as follows: “Please indicate the extent to which you believe an average member of each subfield, in general, is competent to perform the activities below (not whether you think they actually perform them or not).” The following categories of activities were rated: (a) clinical work, treatment & interventions, (b) assessment, (c) research, (d) teaching/training, (e) supervision, (f) consultation, (g) writing/editing, and (h) administration. The activities that comprised each of these categories were the activities that participants rated themselves on earlier in the questionnaire that went into determining their degree of self-stereotyping (see above). The competency scores across all of the domains were then averaged, leading to an overall competency score. A difference score between participant’s own subfield competency ratings and their ratings for each subfield was calculated, creating a degree of threat with lower differences representing a greater deal of threat. Mean competency ratings ranged from 4.30 to 5.49 (clinical 5.49, counseling 4.84, social 4.36, cognitive/experimental 4.30 and own 5.18). Mean differences ranged from –0.48 to 1.03 (clinical -0.48, counseling 0.36, social 0.40 and cognitive/experimental 1.03), with a negative number indicating that subfield is more competent.

Subfield identification. Subfield identification reflects one’s awareness of belonging to one’s subfield and was measured by averaging participant responses on four Likert items: (a) “I often think of myself as a (insert your subfield) psychologist,” (b) “I identify with other members of my subfield,” (c) “My subfield is an important reflection of who I am,” and (d) “I am proud to be a (insert your subfield) psychologist.” These items were rated on a scale from 1 (strongly disagree) to 7 (strongly agree) and all
obtained from items used to assess ingroup identification in Ellemers, Kortekaas and Ouwerkerk’s (1999), Cadinu and Reggiori’s (2002) and Verkuyten and Nekuee’s (1999) research. Cronbach’s alpha for the items in the current study was 0.80. The overall mean on the aggregated score was 5.49 with a standard deviation of 1.13.

Subfield attitude. Each participant’s subfield attitude was computed for their own subfield as well as towards the subfields of interest (clinical, counseling, social and cognitive/experimental). Attitudes in two domains, professional and personal, were assessed and dimensions in these domains were taken from research examining ingroup bias conducted by Fein and Spencer (1997) and Cadinu and Reggiori (2002). For all dimensions, participants were asked to rate the extent to which the trait is characteristic of a typical psychologist from the respective subfield (own, clinical, counseling, social, cognitive/experimental) on a Likert scale ranging from 1 (not at all characteristic) to 7 (completely characteristic). The professional dimensions were professional, competent, scientific, up-to-date, rigorous and efficient and the personal dimensions intelligent, insensitive, trustworthy, arrogant, sincere, friendly and cliquish. An attitude rating for each domain (professional and personal) was computing by taking the average of the scores for each dimension within its respective domain. Cronbach’s alpha levels for the professional items ranged from 0.84 to 0.91 (clinical 0.89, counseling 0.91, social 0.87, cognitive/experimental 0.85, own 0.84) and for the personal items ranged from 0.75 to 0.81 (clinical 0.79, counseling 0.81, social 0.78, cognitive/experimental 0.78, own 0.75).

In addition to attitudes regarding the professional and personal characteristics of subfield members, participants’ attitudes regarding each of the subfield’s importance to the field of psychology was assessed. This was done by averaging the following three
Likert items, (a) “Overall, how representative is each of the following subfields to the field of psychology as a whole?” (b) “In general, how important do you believe each of the following subfields is to the field of psychology as a whole?” and (c) “In general, how important do you believe the activities usually performed by psychologists from each of the following subfields are to the field of psychology as a whole?” The items were answered on a scale ranging from 1 (not at all representative/not at all important) to 7 (completely representative/very important). Cronbach alpha levels for these items ranged from 0.73 to 0.83 (clinical 0.80, counseling 0.83, social 0.75, cognitive/experimental 0.77, own 0.73). An overall attitude score that represented the average of the three domains was also calculated, with Cronbach alpha’s ranging from 0.64 to 0.79 (clinical 0.75, counseling 0.79, social 0.74, cognitive/experimental 0.70, own 0.64).

Behavior. Behavior was measured both in terms of predicted behavior as well as actual behavior and was calculated for each of the four subfields of interest separately. Behavior was divided in research, social and professional interaction realms. Items assessing research behaviors asked for the number of different journals that participants regularly read from each of the subfields (clinical, counseling, social, cognitive/experimental), the number of times per year that participants read journals from the subfields, the number of journals from each of the subfields that participants have subscriptions to and the total number of research projects in which participants incorporated research from each of the subfields. A research behavior score was obtained by dividing the total number for each of these four areas by the total number of the behaviors in the areas within the participants’ own subfields, yielding a ratio of the behaviors for each subfield of interest relative to one’s own subfield.
Social interactions were assessed by asking participants to estimate the average number of times a month over the past year she or he interacted socially with members of each of the subfields (clinical, counseling, social, cognitive experimental and own), also calculated in terms of the ratio of social interactions with members of one’s own subfield to overall social interactions. Professional interactions were assessed by willingness to collaborate and by actual behavior. Willingness to collaborate on research projects, given the opportunity, with members of each subfield was assessed with a Likert-scale item ranging from 1 (not at all willing) to 7 (very willing). Graduate students completed an additional, similar item assessing willingness to collaborate on class projects that was then averaged with the previous item.

Actual behavior was assessed with two items for faculty members and three for graduate students. Both indicated the number of research projects on which they collaborated with a member of each of the subfields and the number of non-required workshops/programs/colloquia sponsored by each of the subfields they attended over the past year. Additionally, graduate students indicated the number of non-required classes taught by members of each of the subfields they have taken. Again, the ratio relative to the participants’ professional interactions and willingness to collaborate with members of one’s own subfield was computed. This resulted in four general behavioral measures: social interaction, research, professional interaction actual and professional interaction predicted. Scores involving actual interactions were only computed for those participants that have opportunity for contact with the respective subfields. Additionally, faculty were asked about the number of number of candidates their departments have considered and
hired from the subfields of interest (computed as a percentage of the total considered and hired).
CHAPTER 8
RESULTS

Because the personal, professional and importance attitudes were all significantly
 correlated with one another for all subfields (correlations ranged from \( r = 0.38 \) to \( r = 0.64 \), all significant at the \( p < .01 \) level; see Appendix F for exact correlations), the
 overall attitude score was used for analyses. The overall attitude score was significantly
correlated with each of the three domains for all subfields (correlations ranged from \( r = 0.75 \) to \( r = 0.86 \), \( p < .01 \) for all correlations; see Appendix F for exact correlations).

Attitudes Toward Own and Other Subfields

To examine the hypothesis more generally, a paired samples \( t \)-test was run
comparing participants’ attitude toward their own subfield with their attitude toward all
other subfields (created by averaging their overall attitude for each of the other subfields).
Results indicated that participants held significantly more positive attitudes toward their
own subfield (\( M = 5.64, SD = 0.69 \)) than towards all other subfields combined (\( M = 5.16, SD = 0.77 \)), \( t(314) = 13.962, p < .001 \).

To look at subfield-by-subfield comparisons, an ANOVA was run with “subfield”
as the factor and “overall attitude” toward each of the four subfields and own subfield as
the dependent variables. Because of the unequal sample sizes for the subfields, only
participants currently identifying with clinical, counseling, social, cognitive/
experimental, developmental or psychobiology/neuropsychology were included in analyses. Each of these had an $n$ ranging from 20 to 40, with the exception of clinical, which had 112. In order to reduce this discrepancy, a random sample of 40 of the clinical psychologists was selected (utilizing SPSS) to use in the analyses.

Results indicated a significant difference by subfield in overall attitude ratings for each of the four subfields [clinical psychologists ($F(5,189) = 2.75, p < .05$), counseling psychologists ($F(5,189) = 7.05, p < .001$), social psychologists ($F(5,189) = 5.37, p < .001$), cognitive/experimental psychologists ($F(5,189) = 3.78, p < .01$)], but not for own subfield, ($F(5,189) = 2.00, p = .08$). This was to be expected, as it was assumed that participants would all rate their own field highly.

<table>
<thead>
<tr>
<th>Identified Subfield</th>
<th>Clinical</th>
<th>Counseling</th>
<th>Social</th>
<th>Cog/Exp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Clinical (N=40)</td>
<td>5.59</td>
<td>.74</td>
<td>5.12</td>
<td>.98</td>
</tr>
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<td>Counseling (N=20)</td>
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<td>.87</td>
<td>5.79</td>
<td>.73</td>
</tr>
<tr>
<td>Social (N=40)</td>
<td>5.29</td>
<td>.83</td>
<td>4.95</td>
<td>.94</td>
</tr>
<tr>
<td>Cog/Exp (N=40)</td>
<td>5.06</td>
<td>.82</td>
<td>4.35</td>
<td>1.30</td>
</tr>
<tr>
<td>Developmental (N=35)</td>
<td>5.23</td>
<td>.65</td>
<td>4.96</td>
<td>.79</td>
</tr>
<tr>
<td>Neuropsych (N=20)</td>
<td>4.83</td>
<td>1.24</td>
<td>4.33</td>
<td>1.20</td>
</tr>
</tbody>
</table>

Figure 3. Means and Standard Deviations of the Overall Attitude Ratings of the Subfields by Participants’ Identified Subfield

Post-hoc analyses were conducted using the Games-Howell method, which is recommended for unequal sample sizes and non-homogenous variances in between measures designs (Jaccard, Becker & Wood, 1984). In rating clinical psychologists, cognitive/experimental psychologists had significantly more negative attitude ratings of
clinical psychologists than clinical psychologists themselves did ($p < .05$). (See Figure 3 for a summary of the means and standard deviations of the attitude ratings discussed here.) There were no other significant differences between subfields in their ratings of clinical psychologists. In rating counseling psychologists, each of the subfields had significantly more negative attitude ratings of counseling psychologists than counseling psychologists themselves did (clinical $p < .05$; all others $p < .01$). Additionally, cognitive/experimental psychologists rated counseling psychologists significantly more negatively than did clinical psychologists ($p < .05$). In rating social psychologists, neuropsychologists rated social psychologists significantly more negatively than did social ($p < .01$), cognitive/experimental ($p < .05$) or developmental psychologists ($p < .05$). There were no other significant differences between subfields in their ratings of social psychologists. In rating cognitive/experimental psychologists, counseling and neuropsychologists rated cognitive/experimental psychologists significantly more negatively than did cognitive/experimental psychologists themselves ($p < .05$). No other significant differences the ratings of cognitive/experimental psychologists were found.

<table>
<thead>
<tr>
<th>Clinical Psychologists</th>
<th>Professional</th>
<th>Personal</th>
<th>Import to Ψ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>SD</td>
<td>$M$</td>
</tr>
<tr>
<td>Clinical vs. Cog/Exp</td>
<td>5.06</td>
<td>.98</td>
<td>4.77</td>
</tr>
</tbody>
</table>

*Note.* Differences for all three domains significant at $p < .01$.

*Figure 4.* Means and Standard Deviations of the Individual Attitude Ratings of the Subfields for Significant Differences: Clinical Psychologists
In order to examine the ratings more closely, independent sample $t$-tests were performed on the significant post-hoc comparisons with the subfields as the grouping variable and the individual domains of the overall attitude ratings at the test variable (professional attitude, personal attitude and important to psychology). (See Figure 4 – Figure 7 for means, standard deviations and $p$ values; all results discussed here were significant at least at the $p < .05$ level.) Results indicated that cognitive psychologists rated clinical psychologists more negatively than clinical psychologists themselves did on all three domains. Counseling and neuropsychologists both rated cognitive/experimental psychologists more negatively than they themselves did on all three domains. Cognitive/experimental psychologists rated social psychologists more positively than neuropsychologists did on all three domains. Social and developmental psychologists also rated social psychologists more positively than neuropsychologists but only on the professional and importance domains. Counseling psychologists rated themselves more positively than cognitive psychologists rated them on all three domains and more

<table>
<thead>
<tr>
<th>Cognitive/Experimental Psychologists</th>
<th>Professional</th>
<th>Personal</th>
<th>Import to $\Psi$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>Cog/Exp vs. Counseling</td>
<td>6.18</td>
<td>.62</td>
<td>5.02</td>
</tr>
<tr>
<td>Neuropsych</td>
<td>5.67*</td>
<td>.88</td>
<td>4.55**</td>
</tr>
<tr>
<td>* Differences from cog/exp rating significant at $p &lt; .05$.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>** Differences from cog/exp rating significant at $p &lt; .01$.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 5. Means and Standard Deviations of the Individual Attitude Ratings of the Subfields for Significant Differences: Cognitive/Experimental Psychologists*
positively than clinical, social, developmental and neuropsychologists did on the professional and importance domains. Cognitive psychologists also rated counseling psychologists more negatively than clinical psychologists did on all three domains.

<table>
<thead>
<tr>
<th></th>
<th>Professional</th>
<th>Personal</th>
<th>Import to Ψ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Neuropsych vs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>4.56</td>
<td>1.25</td>
<td>4.54</td>
</tr>
<tr>
<td>Cog/exp</td>
<td>5.63</td>
<td>.70</td>
<td>5.05</td>
</tr>
<tr>
<td>Developmental</td>
<td>5.88</td>
<td>.88</td>
<td>--</td>
</tr>
</tbody>
</table>

* Differences from neuropsychologist rating significant at p < .05.
** Differences from neuropsychologist rating significant at p < .01.
*** Differences from neuropsychologist rating significant at p < .001.

**Figure 6.** Means and Standard Deviations of the Individual Attitude Ratings of the Subfields for Significant Differences: Social Psychologists

<table>
<thead>
<tr>
<th></th>
<th>Professional</th>
<th>Personal</th>
<th>Import to Ψ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Cog/Exp vs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical</td>
<td>3.97</td>
<td>1.44</td>
<td>4.83</td>
</tr>
<tr>
<td>Counseling vs.</td>
<td>5.84</td>
<td>.91</td>
<td>5.55</td>
</tr>
<tr>
<td>Social</td>
<td>4.53</td>
<td>1.21</td>
<td>--</td>
</tr>
<tr>
<td>Cog/exp</td>
<td>3.97</td>
<td>1.44</td>
<td>4.83</td>
</tr>
<tr>
<td>Developmental</td>
<td>4.80</td>
<td>.99</td>
<td>--</td>
</tr>
<tr>
<td>Clinical</td>
<td>4.83</td>
<td>1.30</td>
<td>--</td>
</tr>
<tr>
<td>Neuropsych</td>
<td>3.85</td>
<td>1.12</td>
<td>--</td>
</tr>
</tbody>
</table>

* Differences from comparison rating significant at p < .05.
** Differences from comparison rating significant at p < .01.
*** Differences from comparison rating significant at p < .001.

**Figure 7.** Means and Standard Deviations of the Individual Attitude Ratings of the Subfields for Significant Differences: Counseling Psychologists
Self-Categorization and Subfield Attitudes

In order to assess the impact of self-stereotyping and identification on attitudes toward members of other subfields, a sequential multiple (hierarchical) regression was performed with overall attitude toward all other subfields as the criterion variable and degree of self-stereotyping and subfield identification as the predictor variables of interest. It was expected that the greater the degree of self-stereotyping and the higher one’s identification, the lower the attitude ratings towards other subfields. Overall attitude towards all other subfields was used (rather than toward the individual subfields) both to decrease the number of analyses performed and because the variables of interest are internal characteristics of the participants and not dependent on a particular subfield. Higher identification and self-stereotyping should lead to lower attitude ratings toward any outgroup and thus averaging all of the outgroups together should not impact the results. The average number of times per month that participants interact with members of other fields and with members of other psychology subfields along with the degree to which participants identified as scientists or practitioners were entered in the first step due to theoretical reasons. [Scientist-practitioner identification was assessed with the item, “To what degree do you identify as a scientist and/or a practitioner?” answered on a scale from 1 (scientist) to 7 (practitioner).] Recall that optimal distinctiveness theory (Brewer, 1991) predicts the degree of contact psychologists have with other psychologists impacts the degree to which they identify by subfield, with increased contact increasing the need for differentiation and therefore the saliency of one’s membership in one’s subfield. However, for psychologists working in an interdisciplinary setting, more frequently coming into contact with other professions will lead to less need for
differentiation by subfield identity. Because of this proposed impact on saliency of subfield identification, they were entered first to look for influences on attitude beyond their impact. Scientist-practitioner identification was included because of Brewer’s (1999) assertion that a primary categorization, particularly a dichotomous distinction, is especially conducive to increased hostility toward the outgroup. Because the scientist-practitioner distinction represents a possible dichotomous variable on which psychologists might identify, thereby influencing outgroup attitudes, it was also included. Subfield identification and the degree of self-stereotyping were entered in the second step. Two cases were outliers (studentized deleted residuals greater than $|3|$ ) and were removed, resulting in an $N$ of 294.

The first model approached significance, $F(3,290) = 2.44$, $p = .064$, and had an $R^2_{Adj} = .015$. The second model was significant, $F(5,288) = 5.39$, $p < .001$, with an $R^2_{Adj} = .070$. This represented a significant change from the first model to the second, $F(2,288) = 9.60$, $p < .001$. In looking at individual predictors, scientist-practitioner ratings significantly predicted attitudes toward all others, with participants more strongly identifying as practitioners reporting more positive attitudes toward all other subfields, $\beta = .136$, $t(290) = 2.29$, $p < .05$. However, although significant, it only accounted for 1.77% of the variance. Subfield identification also significantly predicted attitudes toward all others, with participants more strongly identifying with their subfield reporting more positive attitudes, $\beta = .244$, $t(288) = 4.30$, $p < .001$, accounting for 5.86% of the variance in overall attitude toward other subfields. The degree of self-stereotyping was not a significant predictor of attitudes, $\beta = -.078$, $t(288) = 1.31$, $p = .19$. 
Because of the low amount of variance accounted for, assertions that ingroup favoritism do not necessarily result in outgroup derogation and a desire to better understand the relationship between the variables, it was decided post-hoc to run the analyses again looking at attitude toward own subfield. The variables entered were identical to those entered into the previous analysis but with overall attitude toward own as the criterion variable. The first model was not significant. The second model was significant, $F(5,286) = 14.675, p < .001$, with an $R^2_{\text{Adj.}} = .190$. This represented a significant change from the first model to the second, $F(2,286) = 33.31, p < .001$. In looking at individual predictors, subfield identification was predictive of attitude toward own subfield. Those higher identification with their subfield also had more positive attitudes, $\beta = .433, t(286) = 8.16, p < .001$, accounting for 18.58% of the variance. Self-stereotyping was not a significant predictor.

*Ingroup Affect and Subfield Attitudes*

In order to assess the impact of affective commitment and subfield self-esteem on attitudes toward members of other subfields, a sequential multiple (hierarchical) regression was performed with overall attitude toward all other subfields as the criterion variable and affective commitment and subfield self-esteem as the predictor variables of interest. Contact with other fields and with other subfields as well as participants’ scientist-practitioner ratings were entered in the first step (for reasons described above) and affective commitment and subfield self-esteem entered in the second step. It was expected that the more affective commitment one has to one’s own subfield and the higher one’s subfield self-esteem, the less favorable one’s attitudes will be towards
members of other subfields. Overall attitude toward all others was used for the reasons described above. Two cases were outliers (studentized deleted residuals greater than |3|) and were removed, resulting in an N of 297.

The first model approached significance, \( F(3,293) = 2.40, p = .068 \), and had an \( R^2_{\text{Adj.}} = .014 \). The second model was significant, \( F(5,291) = 5.71, p < .001 \), with an \( R^2_{\text{Adj.}} = .074 \). This represented a significant change from the first model to the second, \( F(2,291) = 10.45, p < .001 \). In looking at individual predictors, subfield self-esteem significantly predicted attitudes toward all others, with participants having higher subfield self-esteem reporting more positive attitudes, \( \beta = .220, t(291) = 3.18, p < .01 \), representing 3.17% of the variance. Subfield affective commitment was not a significant predictor of attitudes, \( \beta = .057, t(291) = .827, p = .41 \).

For reasons mentioned above, it was decided post-hoc to run the analyses again looking at attitude toward own subfield. The variables entered were identical to those entered into the previous analysis but with overall attitude toward own as the criterion variable. The first model was not significant but the second model was significant, \( F(5,209) = 12.99, p < .001 \), with an \( R^2_{\text{Adj.}} = .169 \). This represented a significant change from the first model to the second, \( F(2,290) = 29.49, p < .001 \). In looking at individual predictors, both subfield self-esteem and affective commitment were predictive of attitude toward own subfield. Those with higher subfield self-esteem had more positive attitudes toward their subfield than those with lower subfield self-esteem, \( \beta = .269, t(291) = 4.18, p < .001 \), accounting for 4.93% of the variance in overall attitude toward own subfield. Those with more affective commitment also had more positive attitudes, \( \beta = .191, t(290) = 2.98, p < .01 \), accounting for 2.50% of the variance.
Perceived Threat and Subfield Attitudes

In order to assess the impact of perceived threat from other subfields on attitudes toward members of those subfields, a sequential multiple (hierarchical) regression was performed with overall attitude toward each of the four subfields of interest (clinical, counseling, social and cognitive/experimental) as the criterion variable in four separate analyses and the competency difference score for the respective subfield as the predictor variable of interest. Participants’ scientist-practitioner ratings were entered in the first step as well as contact with the respective subfield, as both seemed possible relevant influences on perceived threat. Although the nature of the contact with other subfields is unknown, being in contact alone is enough to remind participants of the existence, and therefore possible threat, of other subfield members. As attitudes towards specific subfields were of interest in these analyses (versus an overall “other” attitude), contact related only to that subfield was used. The competency difference score was entered into the second step. It was expected that the smaller the competency discrepancy, the more threatening the subfield and therefore the less favorable one’s attitudes towards members of that particular subfield.

In looking at attitudes towards cognitive/experimental psychologists, the first model was not significant. The second model was significant, \( F(3,235) = 4.12, p < .01 \), with an \( R^2_{\text{Adj.}} = .038 \). This represented a significant change from the first model to the second, \( F(1,235) = 8.75, p < .01 \). The competency discrepancy scores were a significant predictor of attitudes, with smaller discrepancies predicting more positive attitudes, \( \beta = -.202, t(235) = 2.96, p < .01 \), accounting for 3.53% of the variance of the attitude ratings.
In looking at attitudes towards social psychologists, the first model was not significant. The second model was significant, $F(3,266) = 49.33, p < .001$, with an $R^2_{Adj.} = 0.35$. This represented a significant change from the first model to the second, $F(1,266) = 145.11, p < .001$. In looking at individual predictors, competency discrepancy scores were a significant predictor of attitudes, with smaller discrepancies predicting more positive attitudes, $\beta = -.594, t(266) = 12.05, p < .001$, accounting for 35.05% of the variance.

In looking at attitudes towards counseling psychologists, the first model was significant, $F(2,255) = 8.38, p > .001$, $R^2_{Adj.} = .054$, as was the second, $F(3,254) = 22.98, p < .001$, $R^2_{Adj.} = 0.20$. Additionally, the second model represented a significant change from the first model, $F(1,254) = 49.03, p < .001$. In looking at individual predictors, scientist-practitioner ratings were significant predictors of attitude, with those identifying more as a practitioner reporting more positive attitudes toward counseling psychologists, $\beta = .248, t(255) = 4.09, p < .001$. Scientist-practitioner ratings accounted for 6.15% of the variance. The competency discrepancy scores were also a significant predictor of attitudes, with smaller discrepancies predicting more positive attitudes, $\beta = -.411, t(254) = 7.01, p < .001$. Discrepancy scores accounted for 15.21% of the variance.

In looking at attitudes towards clinical psychologists, the first model was not significant. The second was significant, $F(3,179) = 13.21, p < .001$, $R^2_{Adj.} = 0.17$, and represented a significant change from the first model, $F(1,179) = 35.31, p < .001$. In looking at individual predictors, competency discrepancy scores were a significant predictor of attitudes, with smaller discrepancies predicting more positive attitudes, $\beta = -.429, t(179) = 5.94, p < .001$. They accounted for 16.16% of the variance.
Perceived Faculty Attitudes and Graduate Students’ Attitudes

In order to assess the impact of perceived mentor attitude on graduate student attitudes, a sequential multiple (hierarchical) regression was performed with overall attitude toward each of the four subfields of interest (clinical, counseling, social and cognitive/experimental) as the criterion variable in four separate analyses. The scientist-practitioner rating was entered in the first step for the theoretical reasons mentioned above. Contact was not included in these analyses because the nature of the contacts for the participants (i.e. positive or negative) with the subfields was unknown and therefore it was difficult to predict how it might influence attitude ratings. Further, it was not significant in previous analyses. Perceived mentor attitudes toward the relevant subfield was entered into the second step. It was expected that mentor attitudes would predict graduate student attitudes towards members of the subfields.

In looking at attitudes towards counseling psychologists, the first model was significant, $F(1,216) = 14.08, p < .001$, and had an $R^2_{Adj.} = 0.06$. The second model was also significant, $F(2,215) = 36.11, p < .001$, with an $R^2_{Adj.} = 0.24$. This represented a significant change from the first model to the second, $F(1,215) = 54.64, p < .001$. Scientist-practitioner ratings were a significant predictor of graduate students’ attitude ratings, with graduate students identifying more as practitioners reporting more positive attitudes toward counseling psychologists, $\beta = .247, t(216) = 3.75, p < .001$, accounting for 6.10% of the variance. Perceived mentor attitude was also significant, with more positive perceived mentor attitudes predictive of more positive graduate students’ attitudes, $\beta = .441, t(215) = 7.29, p < .001$, accounting for 19.01% of the variance.
For attitudes towards clinical psychologists, the first model was significant, $F(1,216) = 11.29, p = .001$, and had an $R^2_{\text{Adj.}} = 0.05$. The second model was also significant, $F(2,215) = 31.68, p < .001$, with an $R^2_{\text{Adj.}} = 0.23$. This represented a significant change from the first model to the second, $F(1,215) = 49.54, p < .001$. Scientist-practitioner ratings were a significant predictor of graduate students’ attitude ratings, with graduate students identifying more with practitioners reporting more positive attitudes toward clinical psychologists, $\beta = .223, t(216) = 3.36, p = .001$. This accounted for 5.43% of the variance. Perceived mentor attitude was also significant, with more positive perceived mentor attitudes predictive of more positive graduate student attitudes, $\beta = .427, t(215) = 7.04, p < .001$. This accounted for 17.81% of the variance.

For attitudes towards social psychologists, the first model was not significant. The second model was significant, $F(2,218) = 27.063, p < .001$, with an $R^2_{\text{Adj.}} = 0.19$. This represented a significant change from the first model to the second, $F(1,218) = 53.03, p < .001$. Perceived mentor attitude towards social psychologists was a significant predictor of attitude toward social psychologists, with more positive perceived mentor attitudes predictive of more positive graduate student attitudes, $\beta = .446, t(219) = 7.28, p < .001$, accounting for 19.45%.

For attitudes towards cognitive/experimental psychologists, the first model was significant, $F(1,218) = 6.03, p < .05$, and had an $R^2_{\text{Adj.}} = 0.03$. The second model was also significant, $F(2,217) = 29.78, p < .001$, with an $R^2_{\text{Adj.}} = 0.22$. This represented a significant change from the first model to the second, $F(1,217) = 52.12, p < .001$. Scientist-practitioner ratings were a significant predictor of graduate students’ attitude ratings, with graduate students identifying more as a scientist reporting more positive
attitudes toward cognitive/experimental psychologists, $\beta = -.164$, $t(218) = 2.46$, $p < .05$, accounting for 2.69% of the variance. Perceived mentor attitude was also significant, with more positive perceived mentor attitudes predictive of more positive graduate student attitudes, $\beta = .438$, $t(217) = 7.22$, $p < .001$, accounting for 18.84% of the variance.

In order to determine whether actual differences existed between faculty and graduate student attitudes, independent sample T-tests were run comparing graduate student and faculty members’ overall attitudes on each of the four subfields. There were no significant differences in the mean attitude ratings for any of the subfields except for clinical psychology, with graduate students having more positive attitudes towards clinical psychologists ($M = 5.45$, $SD = 0.83$) than faculty members ($M = 5.11$, $SD = 1.03$), $t(313) = 3.03$, $p < .01$.

The Impact of Time on Attitudes

Time within the field of psychology was correlated with overall attitude towards one’s own subfield. Analyses indicated a significant negative relationship, with increased time in the field associated with lower attitude ratings ($r = -.12$, $p < .05$) ($N = 314$). In order to attempt to better understand this relationship, correlations were computed between time in the field and overall attitude towards other subfields. This was not significant ($r = -.06$, $p = .25$) ($N = 314$). Given the variation in the amount of time in the field between graduate students and faculty members, analyses were run separately for the two sub-samples. Analyses of the graduate students were not significant, either for attitudes towards one’s own subfield ($r = -.11$, $p = .09$) ($N = 233$) or towards all other subfields ($r = -.01$, $p = .82$) ($N = 233$). The same held true for analyses on the faculty sub-
sample; results were not significant for attitudes towards one’s own subfield ($r = -.08, p = .47$) ($N = 84$) or towards all other subfields ($r = -.13, p = .23$) ($N = 84$).

**Attitudes and Behavior**

In order to examine the relationship between attitudes toward another subfield and behaviors regarding that particular subfield, correlational analyses were conducted and presented in Figures 8 and 9. Recall that analyses involving actual behavior were only performed on those participants with the opportunity to engage in the behaviors with the subfields of interest. Attitudes toward both clinical and cognitive/experimental psychologists were significantly related to participants’ willingness to collaborate with the subfields, respectively, with more positive attitudes predictive of increased willingness to collaborate. However, they were not predictive of actual professional interaction or research behavior, nor were they predictive of social interactions for either subfield [251 (78.4%) of the sample indicated that there was a clinical area located within their department and 221 (69.1%) indicated that there was a cognitive/experimental area]. Attitudes toward counseling psychologists were significantly and positively related to all four domains, with more positive attitudes predicting increased social interaction, willingness to collaborate, actual collaboration and research behaviors [55 (17.2%) of the sample indicated that there was a counseling area located within their department]. Attitudes towards social psychologists were significantly related to research behaviors, social interactions and to participants’ willingness to collaborate with social psychologists in the positive direction, but were not significantly related to social interactions [179 (55.9%) of the sample indicated that there was a social area located within their department].
Additionally, for faculty, hiring practices for the participant’s areas were examined. A paired samples \( t \)-test comparing the number of candidates considered and hired from own subfield versus another subfield indicated that candidates from an area’s own subfield were significantly more likely to be considered for a position (\( M = 13.38, SD = 23.76 \)) than from those from another subfield (\( M = 5.380, SD = 19.10 \)), \( t(52) = 2.26, p < .05 \) and that the candidates from an area’s own subfield were significantly more likely to be hired (\( M = 0.70, SD = 0.40 \)) than from those from another subfield (\( M = 0.30, SD = 0.49 \)), \( t(54) = 3.77, p < .001 \).

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Note. Lower Quadrant = Clinical; Upper Quadrant = Counseling
** \( p < .01 \). *** \( p < .001 \)

Figure 8. Attitude & Behaviors Correlations: Clinical & Counseling Psychologists
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*Note. Lower Quadrant = Cognitive/Experimental; Upper Quadrant = Social
* p < .05. ** p < .01. *** p < .001

*Figure 9. Correlations Between Attitude and Behaviors: Cognitive/Experimental and Social Psychologists*
CHAPTER 9
DISCUSSION

General Findings Regarding Hypotheses

Support was found for a number of the hypotheses. However, there were also a number of significant findings in the direction opposite than that predicted. The mixed findings and possible explanations for them will each be discussed in turn before turning to their fit with the literature, future directions for research and limitations of the current study.

Attitudes toward own and other subfields. The first hypothesis, that psychologists would display less favorable attitudes towards other subfields than towards their own, was supported. Participants held more positive attitudes toward their own subfield than towards all other subfields combined. Additionally, inter-subfield comparisons indicated differential attitudes towards other subfields by subfield identification. Counseling psychologists rated themselves more positively than psychologists from any other subfield rated them. They did so on personal and professional characteristics as well as on their importance to the field of psychology compared to cognitive/experimental psychologists and on professional characteristics and importance compared to clinical, social, developmental and psychobio/neuropsychologists. Clinical psychologists rated themselves more positively on personal and professional characteristics and their overall
importance to psychology than did cognitive/experimental psychologists. Social psychologists rated themselves more positively on professional characteristics and their importance than psychobio/neuropsychologists did. Cognitive/experimental psychologists rated themselves more positively on all three domains (personal, professional and importance) than did either counseling or psychobio/neuropsychologists.

Not only did subfields as a whole rate themselves more positively than at least some other subfields, subfields differed from one another in terms of how they rated other subfields. Cognitive/experimental psychologists rated counseling psychologists more negatively than did clinical psychologists on all three domains and psychobio/neuropsychologists rated social psychologists more negatively than did cognitive/experimental and developmental psychologists. Cognitive/experimental psychologists rated them more positively on all domains while developmental psychologists rated them more positively in the professional and importance domains.

What is clear from these findings, beyond that psychologists think more highly of their own subfield than they do of others, is that they think of other psychologists as belonging to or members of subfields (outgroups), rather than as merely ‘other psychologists,’ and judge them accordingly. If this were not so, we would not find inter-subfield differences. Further, psychologists’ judgments of the various subfields, at least for some, extend beyond the professional realm and move into evaluations of the personal characteristics of the members. However, it is not clear from these findings what differentiates the subfields that extend their less favorable attitudes to a more personal level from those that do not. Cognitive/experimental psychologists consistently rated other subfields lower (or themselves higher) on both professional and personal domains,
as did counseling psychologists. Social and developmental psychologists limited their discrepant evaluations to the professional domains (professional characteristics and importance). Counseling psychologists received the lowest attitude ratings and perhaps their lowered ratings of other subfields across all domains is done in order to boost self-esteem in response to negative attitudes from others, although it is uncertain how aware counseling psychologists are of the negative attitudes others hold of them. This explanation, however, would not hold for cognitive/experimental psychologists, whose attitude ratings, other than from counseling psychologists, where relatively high. No subfields had lower ratings of professional characteristics without also lower having lower ratings of importance. This suggests that participant’s perceptions of the professional characteristics of members of a particular subfield are connected to perceptions of the importance of that subfield to the field of psychology. In support of this, while the correlations between all three domains were significant, they were highest between importance and professional characteristics and lowest between personality characteristics and importance for all four subfields. No other patterns could be discerned.

*Self-categorization and subfield attitudes.* The second hypothesis, that psychologists self-stereotyping and identifying more strongly with their own subfield will have less favorable attitudes towards other subfields, was not supported. Subfield identification predicted attitudes toward all others but in the direction opposite than expected; participants more strongly identifying with their subfield reported more positive attitudes towards other subfields rather than more negative. However, it is important to note that although significant, only 5.8% of the variance in attitudes was
attributable to subfield identification. When the predictors were examined in relation to attitudes towards one’s own subfield, subfield identification accounted for 18.6%.

Explanations for these relationships are speculative. It is unlikely that the unexpected positive relationships resulted from participants identifying with the field of psychology, thereby making all psychologists their ingroup and explaining why other subfield members were also seen positively, because of the findings in support of hypothesis one suggesting that participants were viewing other psychologists as members of outgroups. However, it is possible that participants identifying more strongly with their subfield feel more positively about the field of psychology in general and this positivistic attitude extends to all members of the field. Given the low amount of variance accounted for, speculating on possible reasons for the positive relationship may not be as important because it seems to be less directly related to attitudes towards other subfields than attitudes toward own subfield. Playing a more important role in predicting own subfield attitude supports the notion that ingroup bias does not necessarily result in outgroup derogation.

The degree of self-stereotyping was not a significant predictor of attitudes, either directed towards others or towards one’s own subfield. It is unlikely that there were measurement or operational definition problems with self-stereotyping or with sample size and therefore it is more likely that, at least for this sample, self-stereotyping is not a predictor of attitudes. Reasons for the incongruence with the literature are unknown.

*Ingroup affect and subfield attitudes.* The third hypothesis, that the more affective commitment one has to one’s own subfield and the higher one’s subfield self-esteem the less favorable one’s attitudes towards other subfields, was not supported. Subfield self-
esteem predicted attitudes toward all others but in the direction opposite of what was expected, with participants having higher subfield self-esteem reporting more positive attitudes towards others. However, the amount of variance accounted for (3.17%) was low. Subfield self-esteem accounted for more variance when predicting attitudes towards one’s own subfield (4.9%), with higher subfield self-esteem predicting more positive attitudes. Speculation about the opposite than expected direction between subfield self-esteem and attitudes toward others follows along the lines of that for the relation between subfield identification and attitude toward others. Again, however, given the amount of variance accounted for, it does not appear to be an important predictor for either attitudes towards one’s own subfield or towards other subfields. However, it is important to note that the Cronbach alpha level for the items was on the low end and this may have contributed to the low amount of variance.

Subfield affective commitment, while not a significant predictor of attitudes towards other subfields, was a predictor of own attitude. Those with higher affective commitment indicated more positive attitudes. However, the variance accounted for was low (2.5%), suggesting that, overall, affective commitment was not an important predictor of attitudes. The items had an acceptable Cronbach alpha level and the items (“I would rather not tell others that I belong to my subfield,” “I would like to continue to be identified with my subfield,” and “I dislike being a member of my subfield”) have been used in previous research and appear to have face validity. Therefore, the lack of a relationship is not likely due to measurement issues; rather, affective commitment was just not an important predictor of attitudes for this sample.
*Perceived threat and subfield attitudes.* The fourth hypothesis that greater perceived threat from another subfield results in less favorable attitudes towards that subfield was not supported. It was expected that the smaller the competency discrepancy, the more threatening the subfield and therefore the less favorable one’s attitudes towards members of that particular subfield. However, for all targeted subfields (clinical, counseling, social, cognitive/experimental), the relationship between discrepancy scores and attitudes was significant in the opposite direction. Smaller discrepancies predicted more positive attitudes. The amount of variance accounted for varied, with only 3.5% for cognitive/experimental psychologists, 35.1% for social psychologists, 15.2% for counseling psychologists and 16.2% for clinical psychologists.

Why would more overlap in competency levels lead to more positive attitudes? It is likely that the measurement of threat was problematic. Competence may actually be thought of as an attitude, so it is possible participants’ competency ratings were merely an additional measure of participant’s attitudes toward the subfields, rating more competent those they viewed more favorably. However, while this may have played a role, it is unlikely to be the sole explanation because if the competency ratings were merely a reflection of the attitudes they were supposed to be predicting, the amount of variance accounted for should be higher. And although competency ratings and overall attitude ratings were highly correlated, they were not high enough to suggest multicollinearity. An additional explanation might be that aggregating all of the activities together into an overall competency rating may have washed out an effect, as not all activities are important to the same subfields. Logically, those activities seen as relevant
would be those where threats to competency would activate derogation. However, when analyzed using just clinical and counseling psychologists, the results were the same, suggesting that this is an unlikely sole explanation as well.

It is possible that what was actually being measured was similarity between the participants and members of the other subfields, with participants seeing others more similar in competency as more similar in general. Participants might then rate them more positively due to the similarity, which in some ways serves as a reflection of themselves. In support of this, although all subfields rated counseling psychologists more negatively than counseling psychologists themselves did, clinical psychologists rated them the highest. This is surprising, as the literature would suggest that clinical and counseling psychologists’ similarities would lead to the expectation of a bigger perception of threat. However, perhaps the increased similarity leads to a perception of mutual ingroup membership as practitioners. If a “practitioner” identity is being activated, counseling and clinical psychologists would belong to the same ingroup, and thus, would not feel threatened by the similarity. This suggests not only that the operationalization of “threat” is better framed as “similarity” but also that the scientist-practitioner dichotomy might serve as an additional important basis of ingroup/outgroup distinctions beyond subfield.

It is more difficult to account for the discrepancy between the amount of variances accounted for for the different subfields. Perhaps participants already have more solidified and/or preconceived attitudes towards cognitive/experimental psychologists and therefore similarity to self is not as important in influencing attitudes, but less so for social psychologists and therefore the similarity to self serves as a more important source of attitude basis.
Perceived faculty attitudes and graduate students’ attitudes. The fifth hypothesis predicted that graduate students’ perceptions of faculty /mentor attitudes would predict graduate student attitudes and this hypothesis was supported. More positive perceived faculty/mentor attitudes were predictive of more positive graduate students’ attitudes for all four targeted subfields. They accounted for 19.0% of variance for counseling psychologists, 17.8% for clinical psychologists, 19.5% for social psychologists and 18.8% for cognitive/experimental psychologists.

Because participant’s faculty and mentor attitudes were not actually assessed, it is not possible to determine how much graduate students’ own perceptions of the subfields influenced how they perceived their faculty/mentor attitudes. That no actual differences existed between faculty and graduate student attitudes suggests, however, that the attitudes do match and graduate students are not simply projecting their own attitudes onto faculty. Additionally, the amount of variance explained should be higher if the perceived faculty attitudes were merely reiterations of the graduate students own attitudes.

The impact of time on attitudes. Support was not found for the sixth hypothesis, that time within the field of psychology would correlate positively with favorable attitudes towards one’s own subfield. Analyses indicated a significant negative relationship, with increased time in the field associated with lower attitude ratings. A number of explanations are possible. For instance, graduate student’s attitudes may initially already be so positive about their subfield that it is not possible to detect significantly more positive results. Also, a slight fluctuation down in attitude might be
realistic as graduate students become more familiar with their subfield and move out of a “honeymoon” phase. However, overall the correlation was very low and likely significant due to sample size and therefore unimportant. In further support of this, when analyses were conducted on the sub-samples of graduate students and faculty members separately, no significance was found.

That attitudes are not related to time suggests that attitudes already exist to some degree. It would not be surprising that a graduate student would enter with positive attitudes towards one’s own subfield, knowing the effort that went into deciding upon and gaining entry into a graduate program. However, time does not predict attitudes toward other subfields either. This suggests that graduate students either already hold their less favorable attitudes upon entering (for own subfield) or develop them immediately (for other subfields). Given the connection with mentor attitudes, it might be the latter.

Attitudes and behavior. Support was found for the seventh hypothesis that attitudes would influence behavior. Attitudes toward both clinical and cognitive/experimental psychologists were significantly related to participants’ willingness to collaborate with members of the subfields, with more positive attitudes predictive of increased willingness to collaborate. However, they were not predictive of actual professional interaction or research behaviors, nor were they predictive of social interactions for either subfield. Positive attitudes toward counseling psychologists predicting increased social interaction, willingness to collaborate, actual collaboration and research behaviors. Positive attitudes towards social psychologists were predictive of increased research behaviors, professional interactions and willingness to collaborate but
not of social interaction. Again, the question arises as to why attitude affect behaviors differentially for the various subfields, with some behaviors extending into a personal (social interaction) domain. Counseling psychologists seem to be most susceptible to this, perhaps because of the generally more negative attitudes that other subfields hold of them.

Integration with Past Literature

The mixed support for the hypotheses leads to mixed support for the literature.  

Congruent findings. Many of the findings are in line with the literature and offer support for theories discussed earlier. Psychologists are rating members of their own subfields more positively than members of other subfields, congruent with the ingroup bias literature in general. Even though participants evaluated their own subfield more positively than others, it is still important to note that mean ratings for these other groups were high. This is congruent with arguments that outgroup hostility is not inevitable and that ingroup preference may happen without outgroup derogation (Brewer, 1999; Brown, 2000; Verkuyten, 2002). That internal characteristics affect attitudes towards participant’s own subfield more so than towards other subfield provides additional support for this idea.

That psychologists are identifying by and viewing others as belonging to subfields is congruent specifically with the tenets of optimal distinctiveness theory (Brewer, 1991) and social identity theory (Turner, 1975). Social identity theory received additional support with the relatively high affective commitment and subfield self-esteem ratings, which suggests that membership does have some emotional significance for members (Tajfel & Tuner, 1986; Turner & Onorato, 1999). Further support comes from the
significant relationship between attitude and behaviors (Brown, 2000; Tajfel & Turner, 1986), although the motive of maintaining a positive social identity that is proposed by social identity theory was not assessed in the current study. The behavior-attitude relationship, particularly with professionally related behaviors, is also supportive of realistic group conflict theory (Tajfel & Turner, 1986; Tyler, Kramer & John, 1999), which asserts that groups are motivated to behave in ways to maximize resource attainment.

The results also seem to support dividing identification into the components as suggested by Ellemers, Kortekaas and Ouwerkerk (1999). Recall that they proposed identification has three components: self-categorization, group self-esteem and affective commitment. All three components were significantly correlated in the present study, although in the mid-range, suggesting that although related, they are separate constructs, matching their assertion. However, only identification and subfield esteem predicted attitudes toward other fields; affective commitment did not. This suggests that they are differentially related to attitudes towards others, with affective commitment not accounting for variance even though it is correlated with identification and subfield self esteem. Overall, however, the means of the measures suggest that participants are identifying with their subfield, feeling positively about it and feel committed to it, suggesting that the identity is salient, as proposed by the literature. Participants were also seeing themselves as being similar to other subfield members, although because they were not asked about all psychologists, it is not possible to compare their similarity ratings with their own subfields to that of psychologists in general to say with certainty that fit of category specifications as proposed by self-categorization theory holds true.
The association between scientist-practitioner ratings and attitudes fits with Brewer’s (1999) assertion regarding the importance of a dichotomous distinction in increasing hostility between ingroups and outgroups. Scientist-practitioner identification was often significant, although in general the amount of variance that they accounted for was low. However, because of the nature of the sample, the ratings were skewed in the direction of a scientist orientation, with few participants identifying as practitioners, which may have affected the results. Because ingroup identification saliency was not tested directly (i.e. by comparing identification with other professional realms directly), it is possible other professional ingroups might also serve as important sources of attitudes. The scientist-practitioner dichotomy may be one such source.

*Incongruent findings.* While some of the findings offered support, others are at odds with what the literature would predict. For instance, self-categorization theory postulates that as social identities come to the forefront one sees oneself as more like the relevant ingroup. However, the current results do not support this, as self-stereotyping was not correlated with identification as would be expected, although levels of both were high. Additionally, the assertion that self-stereotyping plays a role in ingroup bias was not supported (Verkuyten & Nekuee, 1999). As mentioned previously, this is unlikely due to measurement or operationalization problems and therefore the reasons for the incongruence with predictions in the literature is unknown. Contact with other subfields or with other disciplines was not related to attitudes, calling into question their impact on identification with subfield, although this was not tested directly. Further, contact was only measured generally in terms of frequency and therefore may not have been measured specifically enough to have an effect.
That higher subfield self-esteem predicted positive attitudes towards others is incongruent with Branscombe and Wann’s (1994) assertion that derogation is associated with self-esteem, although again because motive cannot be determined, it is possible that derogation was not necessary because subfield self-esteem levels were already high.

That perceived threat did not result in stronger ingroup bias, but rather was related to more positive attitudes towards outgroups, does not fit assertions that perceived threat to resources increases the likelihood of enmity. Although significantly lower than counseling psychologists rated themselves, the next highest rating was from clinical psychologists, clearly the most similar to counseling psychologists than any of the other subfields. This also calls into question social identity theory’s tenet that as two groups become more similar, ingroup bias becomes stronger. However, this result does make sense if one considers both of them practice oriented, and therefore ingroups. Cognitive and social psychologists rated each other similarly highly, as well as developmental psychologists. Psychobio/neuropsychologists rated everyone lower, regardless of similarity or scientist-practitioner orientation of the subfield. Overall, this provides further support of the scientist-practitioner fragmentation of the field. However, the lack of support for this must be viewed in light of the concerns about the measurement of threat in this study.

Re-conceptualization of the Nomological Model

The findings suggest a change to the nomological framework suggested earlier. Subfield self-esteem was related to attitudes toward other subfields (as well as towards own subfield), but affective commitment was only related to attitude toward own subfield. Similarly, identity with own subfield predicted attitudes (towards both own and
other) but self-stereotyping was not related to either. This suggests conceptualizing measuring identification in terms of three components (subfield self-esteem, identification and affective commitment) is legitimate. However, the results also suggest that this saliency of identification with subfield relates most directly to attitude toward own subfield, which then impacts attitudes toward other subfields.

Taking into account the possible explanations mentioned above, these may influence a general overall attitude toward psychology which then may be influential in attitudes towards other subfields, but in a positive direction. Self-stereotyping was not related to attitudes at all and therefore does not seem to be relevant in terms of understanding differential attitudes. However, the relationship between attitude towards one’s own subfield/psychology and other subfields is likely moderated by a number of factors, which would explain why participants display negative attitudes towards some other subfields despite the prediction of a positive attitude by the identification factors. The relationship between mentor/faculty attitudes was supported and therefore is included in the model. Given the problems with the measurement of threat and the support for its influence in the literature, it is kept in the model. Scientist-practitioner orientation is also proposed as a possible moderator, given the significant variance it accounted for as well as the theoretical fit. Although not specified in the re-conceptualized model, attitude and behavior toward other subfields should be conceptualized and measured in both professional and personal domains. It was not incorporated here because it is still too unclear what determines when attitudes and behaviors extend into the personal realm. This new way of conceptualizing the model is presented in Figure 10. However, it is possible that important variables are missing.
As with all research, there are some limitations to the current study. Due to the design of the study, it is not possible to speak in terms of causal relationships between the variables. Although attempting to account for some potential confounds, such as scientist-practitioner ratings and contact with others, the lack of previous research to draw upon makes it likely the current research has not accounted for other potential confounds. Given the low variance that the variables accounted for in general, it is likely that some important variables have not been included.

Figure 10. Re-conceptualized Nomological Model Relating Subfield Attitudes to Behavior

Limitations
Additionally, the ability to generalize beyond the sample is limited. Subfields were not represented equally, and therefore extending the findings to all psychologists or to some subfields is suspect. The sample was also primarily graduate students who are at the beginning of their careers and so extending the findings to those further along may not be appropriate. This also limits the ability to clearly understand the impact of time. Additionally, the large percentage of faculty with disciplines other than psychology in their departments may have skewed the results, making this subset of the sample less likely to identify by subfield or to show ingroup preferences toward their subfield. Certainly, extending the results to those outside of academia would be premature. Further, there is also no way to determine differences between those who chose to respond and those that did not.

As mentioned previously, there are some concerns about the operationalization of some of the variables, particularly threat, and the low Cronbach alpha level for subfield self-esteem may have been problematic. The study also relied on self-report of both attitudes and behaviors, which may not be reliable. While attitudes are difficult to assess otherwise, social desirability may have affected the results, particularly because the survey asked about colleagues and peers. However, the responses were normally distributed, suggesting that it is unlikely that this happened. The vagueness of the behavioral problems was also problematic. Many participants claimed that these questions were difficult to answer due to the long time duration the questions often referred to and some participant’s reported uncertainty as to the accuracy of their answers. However, keeping the questions vague was done on purpose in order to apply to
those with varying amounts of experience and because of the exploratory nature of the research in general. Even with the vagueness, significance was still found.

Future Directions

There are a number of directions that future research should explore and methodological concerns to address. Also mentioned previously, there are some concerns about the operationalization of threat in the current study and future research should explore this construct further and operationalize it differently. This might best be done through the use of an experimental design, although more direct self-report questions might also be utilized. However, it might be difficult to disentangle self-report measures of threat from attitude ratings. Also along the lines of measurement, more detail about the nature of participants’ contact with other subfields should be assessed. It may not have been important in the current study because of the general nature in which it was assessed. Additionally, future research should also examine the scientist-practitioner dichotomy as a source of ingroup bias. It accounted for some significant variance in the current study, although low. Again, given the restricted range of identification in the current study, a more varied sample should be used.

Behavioral implications of the attitudes should be examined more closely. It is clear that psychologists are identifying by subfield, and perhaps by scientist-practitioner orientation, and that this identification is having an effect on behaviors. In order to better understand the implications for the field of psychology, specific questions covering more domains of behavior would be useful. Utilizing an experimental design to do so, in addition to self-report, would be helpful and negate some of the problems associated with self-report.
Understanding what contributes to subfield identification is important, as identifying by subfield does seem to be related to differential attitudes. Additional research examining which factors are important in forming subfield identification in psychologists, or at least factors resulting in differential attitudes, is important in order to continue the growth of a field and prevent further fragmentation.

Future research should also strive to understand why some attitudes extend to a personal realm for some subfields and not others and how this differentially affects behavior. Counseling psychology, in particular, seems susceptible to this and seems to engender more negative attitudes in general, although counseling psychologists hold themselves in high esteem. Why other subfields view counseling psychology less favorably than the other subfields examined remains to be seen. A possible answer may be less familiarity with the subfield, its focus and what its members do. It is also a relatively recent addition to the field and examining whether similarly “newer” subfields are susceptible to the same may help account for the findings or suggest alternate explanations. Understanding this relationship is particularly important to counseling psychology if they hope to maintain their viability within the field of psychology.

At this point, a clearer understanding of the attitudes and their impact is needed prior to suggesting any training changes. However, as the relationships are elucidated, thought should be given to the training of new psychologists, as this is where attitude change is most likely to occur. For instance, how segregated are area training programs? How much overlap occurs between courses? What messages are faculty sending regarding other areas? Are they modeling inter-subfield collaboration? Are interactions
with other subfields encouraged? Are graduate students educated on what other subfields do, the benefits of these activities and how they related to the whole of psychology?

Certainly, the relationship between attitudes and behaviors is a complex one. The current research suggests that psychologists do indeed identify by subfield. Further, support was found for differential attitudes based on subfield identification, although the factors influencing attitude strength is less clear. Support was also found for these attitudes affecting behavior. While all three basic tenets were supported, the details are more equivocal and worthy of more research in order to continue the growth of a field as whole and prevent further fragmentation.
APPENDIX A

SOLICITATION FOR PARTICIPATION
Dear (insert name of Department chair),

My name is Jamie Smith and I am collecting my dissertation data. My population of interest is psychology faculty and graduate students and I am exploring the attitudes that psychologists have of other psychologists as well as the impact of these attitudes on selected behaviors.

I would greatly appreciate it if you would pass this or the URL on to your department so that the faculty and students may participate if they desire. Participation requires completing a brief online survey that takes around 20-30 minutes that can be accessed at the following link:

http://www.ohpsych.org/PsychAttitudes/homepage.htm

The first page that you will see is the informed consent page. Participation is voluntary, participants may discontinue at any time and no identifying information is requested in the survey. If you have any questions about the survey or this research project, please feel free to contact me at smith.3576@osu.edu. You may also contact my advisor, Don Dell, at dell.1@osu.edu.

The methods of this research and the plan for protection of rights of participants have been reviewed and approved by the Office of Responsible Research Practices (www.orrp.ohio-state.edu), which oversees all research conducted at The Ohio State University. This plan received Institutional Review Board approval on March 6, 2004 (Protocol # 2004E0109).

I thank you in advance.

Jamie Smith
APPENDIX B

SURVEY INSTRUCTIONS
The following was the homepage for the study. Portions in italics represent hyperlinks in the survey. All participants were directed to this site before choosing the appropriate survey to take. This page provided information for informed consent and clicking to continue indicated informed consent on the part of the participant.

If you are not over the age of 18 and a graduate student in the field of psychology or if you do not hold a full or part time faculty position in a doctoral program offering a degree in psychology, please exit this survey now.

Why is this study being done?
Thank you for your interest and participation! Research has focused on the public’s perception of psychology and psychologists. This focus is appropriate, as we need to advance the public’s view of our field as a viable one if we are to survive. Research on psychologists’ views of other psychologists, on the other hand, is scarce. Yet we cannot expect the public to understand the field of psychology or to hold favorable views of the field as a whole if psychologists themselves do not. Therefore, the current research project is being undertaken in an attempt discern what perceptions psychologists hold of other psychologists, what some of the factors influencing these attitudes are and possible behavioral consequences of them.

What will I have to do?
You are being asked to complete a brief survey. Because the purpose of the research is to examine psychologists’ views of other psychologists, it is very important that you only complete the survey if you are in the field of psychology and over the age of 18.

What do I need to know first?
Before completing the survey, please read and understand the following:
- All responses are strictly confidential. Because of the nature of internet research, it is not possible to say they are completely anonymous. However, no identifying information will be collected and there will be no effort to link the information submitted with sending computers.
- As answers are confidential, you are encouraged to attempt to answer all of them. However, all questions on this survey are voluntary: you can skip any question you would prefer not to answer.
- The survey is designed so that none of your responses are submitted until the survey is complete and you choose to send your responses. You may quit at any time by exiting your browser and your answers will not be submitted.
If you do not properly exit or close your Internet browser when you are finished with your surveys it is possible that an outside party could view your answers. Be sure to close your browser after you have submitted your responses or if you choose to discontinue participation.  

Although there are no direct benefits to your participation, the information gained will contribute to our understanding of the field, identify potential training issues and increase the collective contributions the field as a whole has to offer. There are no known risks to this study.  

If you would like further information about this study, please contact the principle investigator, Jamie Smith, at psychattitudes@hotmail.com. Jamie is a graduate student in the Counseling Psychology program in the Department of Psychology at The Ohio State University. You may also contact her advisor, Dr. Don Dell, at dell.1@osu.edu.  

The methods of this research and the plan for protection of rights of participants have been reviewed and approved by the Office of Research and Risks Protection (www.orrp.ohio-state.edu), which oversees all research conducted at The Ohio State University. This plan received Institutional Review Board approval on March 6, 2004 (Project # 2004E0109).  

Research guidelines do not allow us to interview minors. By completing the survey, you acknowledge that you are at least 18 years old, that you understand the purpose of the project, give your consent to participate and understand that you are free to withdraw from the study at any time.  

The survey takes about 30 minutes to complete.  

Ready to get started?  
In the pages that follow, please use the "Continue" button at the bottom of the page to move through the survey. If you click on any of the above links, you may return to this page by using the back button on your web browser.  

By clicking on the appropriate “Take Survey” below, you indicate that you have read the above points and give your consent to participate.

Take Survey - Graduate Student

Take Survey - Faculty
APPENDIX C

SURVEY COMPLETED BY PARTICIPANTS: GRADUATE STUDENT VERSION
The following is the survey completed by graduate students. Response options were provided for participants for some questions; these are indicated in parentheses at the end of the question. If none are given, the answer was typed in by the participant.

1. Are you a faculty member or a graduate student? (Faculty, graduate)
2. Age
3. Gender (male, female)
4. Race/Ethnicity (Caucasian, Asian American, African American, Hispanic, Native American, Biracial, Other)
5. Which degree are you ultimately working toward? (Ph.D, Psy.D, Ed.D, Other)
6. Which subfield of psychology most closely describes the area in which you will receive your degree? (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, neuroscience/psychobiology/neuropsychology, educational, health)
7. How far along are you into your graduate training in psychology (in yrs.)? Include all graduate work, even if done in separate programs (i.e. a masters and a doctoral program). Include the current year. (1,2,3,4,5,6,7,8,8+)
8. What is the approximate total student population of your current institution? (0-5,000, 5001-10,000, 10,001-15,000, 15,001-20,000, 20,001 – 25,000 etc. to 45,000+)
9. What is the department called in which your program is located (e.g. psychology)?
10. How many full-time faculty are employed in your area or program?
11. How many full-time faculty are employed in your department? If you are unsure, your department web site should have a list of faculty.
12. How many other subfields are located within your department? This information should also be easily accessible from your department web site.
13. Which other subfields are located within your department? Check all that apply. (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, psychobiology/neuropsychology, educational, health)
14. In a typical month over the past year, how many days does your role as a student bring you into contact with the faculty and/or students of these other subfields? You should only include interactions that are a function of your position or education (i.e. serving on committees, taking classes) and not those done by choice (i.e. choosing to socialize). Please indicate frequency of interaction for each subfield (do not include your own). (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, psychobiology/neuropsychology, educational, health)
15. Are any other disciplines outside of psychology located within your buildings(s)? If no, skip to question 19. (yes, no)
16. How many other disciplines are located within your building(s)?
17. Which other disciplines are located within your building(s)?
18. In a *typical* month over the past year, how many days do you interact with the faculty and/or students of these other fields?

19. To what degree do you identify as a scientist and/or a practitioner. (1 *scientist*, 2, 3, 4, 5, 6, 7 *practitioner*)

20. Please check the activities that you envision yourself engaging in once you have obtained your degree. (see below)

21. Please check all of the activities that you feel a typical member of your subfield engages in. (see below)

The following activities were used for questions 20 and 21.

**Assessment**
- Use of objective personality inventories
- Use of vocational interest inventories/aptitude assessments
- Use of intelligence tests
- Use of projective techniques
- Other self (write in)
- Other typical member (write in)

**Research**
- Present findings
- Direct research group
- Data analysis
- Treatment process/outcome research
- Test development research
- Develop funding proposals
- Interdisciplinary collaboration
- Experimental (laboratory) research
- Field (observational) research
- Qualitative research
- Other self (write-in)
- Other typical member (write in)

**Supervision**
- Provide clinical supervision
- Program/services evaluation
- Other self (write in)
- Other typical member (write in)

**Teaching/training**
- Teach courses
- Direct independent studies
- Serve on examination committees
- Serve on other student committees
- Advise students
- Direct student research
- Mentor students
- Advise student organizations
Other self (write in)
Other typical member (write in)

Administration
- Program planning
- Represent unit on policy-making bodies
- Personnel assignment and task allocation
- Evaluate staff performance
- Budget/resource allocation
- Other self (write in)
- Other typical member (write in)

Consultation
- Needs assessment
- Service provision
- Client education/advisement
- Serve as expert witness
- Program evaluation
- Other self (write in)
- Other typical member (write in)

Writing/editing
- Write for professional publications
- Serve on editorial boards
- Write for general public
- Journal editor
- Other self (write in)
- Other typical member (write in)

Clinical Work, Treatments & Interventions
- Individual counseling/therapy
- Couples/family counseling/therapy
- Group counseling/therapy
- Inpatient treatment
- Outpatient treatment
- With adults
- With adolescents
- With children
- Long-term counseling/therapy
- Brief counseling/therapy
- Other self (write in)
- Other typical member (write in)

Focus of clinical work, Treatment & Interventions
- Psychoses
- Anxiety disorders
- Depression
- Bipolar disorder
- Somatic problems
- Eating disorders
marital/relationship problems
sexual dysfunction
grief & bereavement
disabilities and chronic illness
HIV/AIDS
drug and alcohol problems
sexual or physical abuse
personal adjustment
career/vocational concerns
Other self (write in)
Other typical member (write in)

22. Please check the settings that you envision yourself working in once you have obtained your degree. (see below)
23. Please check all of the settings in which you feel a typical member of your subfield works. (see below)

The following settings were used for questions 22 and 23.

College or university
Counseling center
VA hospital
Non-academic Research facility
Government agency
Private industry
Community mental health center
Private practice
Full-time consultation
Other self (write in)
Other typical member (write in)

The following questions were answered on a Likert scale anchored with 0 (strongly disagree) and 7 (strongly agree).

24. I often think of myself as a (insert your subfield) psychologist.
25. I identify with other members of my subfield.
26. I am like other members of my subfield.
27. My subfield is an important reflection of who I am.
28. I think my subfield has little to be proud of.
29. I feel good about my subfield.
30. I have little respect for my subfield.
31. I would rather not tell others that I belong to my subfield.
32. I would like to continue to be identified with my subfield.
33. I dislike being a member of my subfield.
34. I am proud to be a (insert your subfield) psychologist.

The following questions were answered once each for the clinical, counseling, social and cognitive/experimental subfields as well as for their own subfield. Participants were instructed to complete the items for each subfield, even if they were a member of one of the areas.

35. *Overall*, how representative is each of the following subfields to the field psychology as a whole? (1 *not at all representative* to 7 *completely representative*)

36. Please indicate the extent to which you believe an *average member* of each subfield, *in general*, is *competent* to perform the activities below. (Not whether you think they actually perform them or not.) For a reminder of the specific tasks under each activities, put your mouse over or click on the activity. To return to this section, click on the activity title again. (1 *not at all competent* to 7 *completely competent*; activities rated included clinical work, treatment & interventions, assessment, research, teaching/training, supervision, consultation, writing/editing, administration)

37. *In general*, how important do you believe *the activities usually performed* by psychologists from each of the following subfields are to the field of psychology as a whole? (1 *not at all important* to 7 *extremely important*)

38. *In general*, how important do you believe each of the following subfields is *the field of psychology* as a whole? (1 *not at all important* to 7 *extremely important*)

39. *In general*, how important do you believe your *faculty members or mentors* believe each of the following subfields are to the field of psychology as a whole? (1 *not at all important* to 7 *extremely important*)

40. For each professional trait below, indicate the corresponding degree to which that trait is characteristic of a psychologist for each of the subfields below. (1 *not at all characteristic* to 7 *very characteristic*; traits rated include professional, competent, scientific, up-to-date, rigorous, efficient)

41. For each personality trait below, indicate the corresponding degree to which that trait is characteristic of a psychologist for each of the subfields below. (1 *not at all characteristic* to 7 *very characteristic*; traits rated include intelligent, insensitive, trustworthy, arrogant, sincere, friendly, cliquish)

42. How many times have you collaborated on a research project with someone (graduate student or faculty) from each of the following subfields? Include the total number of separate projects, regardless of whether you worked with a particular collaborator multiple times.

43. How willing would you be to collaborate with a psychologist from each of the following subfields on a research project, given the opportunity? (1 *not at all willing* to 7 *very willing*)
44. How many different journals published by the following subfields do you read regularly? By regularity, I mean that you make it a point to read the journal. Do not include those read for a specific research project/assignment.

45. What is the average number of times per year that you read journals from the following subfields? Include the total number of times, regardless of whether the same journal is read multiple times a year. Do not include times you read for a specific research project/assignment.

46. How many subscriptions do you have to journals published by the following subfields?

47. How frequently do you incorporate findings from the following subfields (literature largely found in journals published outside of your own subfield) into own research? Give the number of research projects you have worked on for which you have done so.

48. Over the course of an average month of the past year, how many days did you interact socially with a member from the following subfields?

49. Over the past year, how many non-required programs, workshops and colloquia sponsored by the following subfields did you attend? You may count required attendance as long as the requirement did not have to be fulfilled by going to a program, workshop or colloquium sponsored by that subfield.

50. What was the total number of programs, workshops or colloquia offered by your department that you attended last year?

51. How many non-required classes taught by faculty from the following subfields have you taken? Include current classes. You may include a class that fulfilled a requirement if it did not have to come from that specific subfield.

52. How many non-required classes have you taken so far? Include current classes.

53. How likely would you be to choose to work with a fellow classmate from the following subfields on a class project? (1 not at all willing to 7 very willing)
APPENDIX D

SURVEY COMPLETED BY PARTICIPANTS: FACULTY VERSION
The following is the survey completed by faculty respondents. Response options were provided for participants for some questions; these are indicated in parentheses at the end of the question. If none are given, the answer was typed in by the participant.

1. Are you a faculty member or a graduate student? (Faculty, graduate)
2. Age
3. Gender (male, female)
4. Race/Ethnicity (Caucasian, Asian American, African American, Hispanic, Native American, Biracial, Other)
5. Which degree in psychology do you hold? (Ph.D, Psy.D, Ed.D, Other)
6. What year did you receive your degree?
7. Which subfield of psychology most closely describes the area in which you received your degree? (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, psychobiology/neuropsychology, educational, health)
8. Which subfield do you most closely identify with now? (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, psychobiology/neuropsychology, educational, health)

The following questions refer to the institution granting your degree:
9. Which institution granted your degree?
10. In which department was your program located? (e.g. psychology)

The following questions refer to the institution in which you are currently employed. If more than one, please answer in regards to the one you consider your primary appointment as a psychology faculty member.
11. What is the approximate total student population of your current institution? (0-5,000, 5,001-10,000, 10,001-15,000, 15,001-20,000, 20,001 – 25,000 etc. to 45,000+)
12. What is the department called in which your program is located (e.g. psychology)?
13. How long have you been at your current institution? If less than one year, enter in 1 year. Include the current year in your total.
14. What is your current appointment? (Full professor, associate professor, assistant professor, adjunct, professor emeritus, lecturer, instructor, other)
15. How many full-time faculty are employed in your area or program? Include yourself.
16. How many full-time faculty are employed in your department? Include yourself.
17. How many other subfields are located within your department?
18. Which other subfields are located within your department? Check all that apply. (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, psychobiology/neuropsychology, educational, health)
19. In a typical month over the past year, how many days does your role as a faculty member bring you into contact with the faculty and/or students of these other subfields? You should only include interactions that are a function of your position or
education (i.e. serving on committees, taking classes) and not those done by choice (i.e. choosing to socialize). Please indicate frequency of interaction for each subfield (do not include your own). (clinical, counseling, social, cognitive/experimental, developmental, school, industrial/organizational, quantitative, psychobiology/neuropsychology, educational, health)

20. Are any other disciplines outside of psychology located within your buildings(s)? If no, skip to question 24. (yes, no)

21. How many other disciplines are located within your building(s)?

22. Which other disciplines are located within your building(s)?

23. In a typical month over the past year, how many days do you interact with the faculty and/or students of these other fields?

24. To what degree do you identify as a scientist and/or a practitioner. (1 scientist, 2, 3, 4, 5, 6, 7 practitioner)

25. Please check the activities that you engage. Include all activities engaged in on a professional level, regardless whether done so as a faculty member or not. (see below)

26. Please check all of the activities that you feel a typical member of your subfield engages in. (see below)

The following activities were used for questions 25 and 26.

**Assessment**
- Use of objective personality inventories
- Use of vocational interest inventories/aptitude assessments
- Use of intelligence tests
- Use of projective techniques
- Other self (write in)
- Other typical member (write in)

**Research**
- Present findings
- Direct research group
- Data analysis
- Treatment process/outcome research
- Test development research
- Develop funding proposals
- Interdisciplinary collaboration
- Experimental (laboratory) research
- Field (observational) research
- Qualitative research
- Other self (write-in)
- Other typical member (write in)

**Supervision**
- Provide clinical supervision
- Program/services evaluation
- Other self (write in)
Other typical member (write in)

**Teaching/training**
- Teach courses
- Direct independent studies
- Serve on examination committees
- Serve on other student committees
- Advise students
- Direct student research
- Mentor students
- Advise student organizations
- Other self (write in)
- Other typical member (write in)

**Administration**
- Program planning
- Represent unit on policy-making bodies
- Personnel assignment and task allocation
- Evaluate staff performance
- Budget/resource allocation
- Other self (write in)
- Other typical member (write in)

**Consultation**
- Needs assessment
- Service provision
- Client education/advisement
- Serve as expert witness
- Program evaluation
- Other self (write in)
- Other typical member (write in)

**Writing/editing**
- Write for professional publications
- Serve on editorial boards
- Write for general public
- Journal editor
- Other self (write in)
- Other typical member (write in)

**Clinical Work, Treatments & Interventions**
- Individual counseling/therapy
- Couples/family counseling/therapy
- Group counseling/therapy
- Inpatient treatment
- Outpatient treatment
- With adults
- With adolescents
- With children
- Long-term counseling/therapy
Brief counseling/therapy
Other self (write in)
Other typical member (write in)

Focus of clinical work, Treatment & Interventions
psychoses
anxiety disorders
depression
bipolar disorder
somatic problems
eating disorders
marital/relationship problems
sexual dysfunction
grief & bereavement
disabilities and chronic illness
HIV/AIDS
drug and alcohol problems
sexual or physical abuse
personal adjustment
career/vocational concerns
Other self (write in)
Other typical member (write in)

27. Please check the settings in which you work. Include all settings worked in on a professional level, regardless of whether done so as a faculty member. (see below)
28. Please check all of the settings in which you feel a typical member of your subfield works. (see below)

The following settings were used for questions 27 and 28.

College or university
Counseling center
VA hospital
Non-academic Research facility
Government agency
Private industry
Community mental health center
Private practice
Full-time consultation
Other self (write in)
Other typical member (write in)

The following questions were answered on a Likert scale anchored with 0 (strongly disagree) and 7 (strongly agree).
29. I often think of myself as a (insert your subfield) psychologist.
30. I identify with other members of my subfield.
31. I am like other members of my subfield.
32. My subfield is an important reflection of who I am.
33. I think my subfield has little to be proud of.
34. I feel good about my subfield.
35. I have little respect for my subfield.
36. I would rather not tell others that I belong to my subfield.
37. I would like to continue to be identified with my subfield.
38. I dislike being a member of my subfield.
39. I am proud to be a (insert your subfield) psychologist.

The following questions were answered once each for the clinical, counseling, social
and cognitive/experimental subfields as well as for their own subfield. Participants were
instructed to complete the items for each subfield, even if they were a member of one of
the areas.

40. Overall, how representative is each of the following subfields to the field psychology
as a whole? (1 not at all representative to 7 completely representative)
41. Please indicate the extent to which you believe an average member of each subfield,
in general, is competent to perform the activities below. (Not whether you think they
actually perform them or not.) For a reminder of the specific tasks under each
activities, put your mouse over or click on the activity. To return to this section, click
on the activity title again. (1 not at all competent to 7 completely competent;
activities rated included clinical work, treatment & interventions, assessment,
research, teaching/training, supervision, consultation, writing/editing, administration)
42. In general, how important do you believe the activities usually performed by
psychologists from each of the following subfields are to the field of psychology as a
whole? (1 not at all important to 7 extremely important)
43. In general, how important do you believe each of the following subfields is the field
of psychology as a whole? (1 not at all important to 7 extremely important)
44. For each professional trait below, indicate the corresponding degree to which that
trait is characteristic of a psychologist for each of the subfields below. (1 not at all
characteristic to 7 very characteristic; traits rated include professional, competent,
scientific, up-to-date, rigorous, efficient)
45. For each personality trait below, indicate the corresponding degree to which that trait
is characteristic of a psychologist for each of the subfields below. (1 not at all
characteristic to 7 very characteristic; traits rated include intelligent, insensitive,
trustworthy, arrogant, sincere, friendly, cliquish)
46. Over the past 5 years, how many times have you collaborated on a research project with someone (graduate student or faculty) from each of the following subfields? Include the total number of separate projects, regardless of whether you worked with a particular collaborator multiple times.

47. How willing would you be to collaborate with a psychologist from each of the following subfields on a research project, given the opportunity? (1 not at all willing to 7 very willing)

48. How many different journals published by the following subfields do you read regularly? By regularity, I mean that you make it a point to read the journal. Do not include those read for a specific research project/assignment.

49. What is the average number of times per month that you read journals from the following subfields? Include the total number of times, regardless of whether the same journal is read multiple times a year. Do not include times you read for a specific research project/assignment.

50. How many subscriptions do you have to journals published by the following subfields?

51. How frequently do you incorporate findings from the following subfields (literature largely found in journals published outside of your own subfield) into own research? Give the number of research projects you have worked on for which you have done so.

52. Over the course of an average month of the past year, how many days did you interact socially with a member from the following subfields?

53. Over the past year, how many non-required programs, workshops and colloquia sponsored by the following subfields did you attend? You may count required attendance as long as the requirement did not have to be fulfilled by going to a program, workshop or colloquium sponsored by that subfield.

54. What was the total number of programs, workshops or colloquia offered by your department that you attended last year?

55. If a member of the APA, how votes for representatives to the APA council did you allocate to your own subfield division? Include the number from the most recent allocation.

56. Over the past five years, have any positions been filled in your area or program? (yes, no)

57. How many candidates from other subfields have been considered for faculty appointments within your area?

58. How many candidates from your own subfield have been considered for faculty appointments within your area?

59. How many faculty appointments for positions within your subfield area were filled with members of your own subfield?

60. How many faculty appointments for positions within your subfield area were filled with members of another subfield?
APPENDIX E

PERCENTAGE OF RESPONDENTS THAT ENGAGE/WORK (FACULTY) OR ANTICIPATE ENGAGING/WORKING (GRADUATE STUDENTS) BY VARIOUS ACTIVITIES/SETTINGS.
### Assessment

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of objective personality inventories</td>
<td>55.6</td>
</tr>
<tr>
<td>Use of vocational interest inventories/aptitude assessments</td>
<td>19.4</td>
</tr>
<tr>
<td>Use of intelligence tests</td>
<td>42.5</td>
</tr>
<tr>
<td>Use of projective techniques</td>
<td>19.4</td>
</tr>
<tr>
<td><strong>Other</strong> (neuropsych testing, symptom inventories, organizational assessment, research focused, substance use, achievement tests, court evaluations, intake assessments)</td>
<td>18.4</td>
</tr>
</tbody>
</table>

### Research

<table>
<thead>
<tr>
<th>Research Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present findings</td>
<td>88.8</td>
</tr>
<tr>
<td>Direct research group</td>
<td>69.7</td>
</tr>
<tr>
<td>Data analysis</td>
<td>85.6</td>
</tr>
<tr>
<td>Treatment process/outcome research</td>
<td>39.4</td>
</tr>
<tr>
<td>Test development research</td>
<td>29.7</td>
</tr>
<tr>
<td>Develop funding proposals</td>
<td>70.6</td>
</tr>
<tr>
<td>Interdisciplinary collaboration</td>
<td>74.1</td>
</tr>
<tr>
<td>Experimental (laboratory) research</td>
<td>59.4</td>
</tr>
<tr>
<td>Field (observational) research</td>
<td>43.1</td>
</tr>
<tr>
<td>Qualitative research</td>
<td>34.1</td>
</tr>
<tr>
<td><strong>Other</strong> (Descriptive, applied work, statistical modeling, attend conferences, reviewing, secondary data, specific focus of research)</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Supervision

Provide clinical supervision 37.8
Program/services evaluation 30.3
Other (professional supervision, research supervision, teaching supervision) 1.6

Teaching/Training

Teach courses 82.2
Direct independent studies 66.3
Serve on examination committees 56.9
Serve on other student committees 65.9
Advise students 72.5
Direct student research 70.9
Mentor students 83.1
Advise student organizations 36.9
Other (construct teaching materials) 1.3

Writing

Write for professional publications 86.9
Serve on editorial boards 48.4
Write for general public 38.8
Journal editor 23.4
Other (review journal articles, peer review manuscripts, review grants, internal technical reports) 2.8
Consulting

Needs assessment 34.7
Service provision 28.4
Client education/advisement 30.0
Serve as expert witness 14.7
Program evaluation 27.5
Other (not identified) 0.3

Administration

Program planning 47.2
Represent unit on policy-making bodies 32.8
Personnel assignment and task allocation 24.7
Evaluate staff performance 31.3
Budget/resource allocation 28.4
Other (departmental assessment, eval for T&P, university committee, other planning committees, oversee department clinic) 1.3

Clinical Work, Treatments & Interventions

Individual counseling/therapy 40.9
Couples/family counseling/therapy 32.5
Group counseling/therapy 30.9
Inpatient treatment 18.4
Outpatient treatment 34.4
With adults 36.3
With adolescents 28.8
With children 22.5
Long-term counseling/therapy 26.9
Brief counseling/therapy 35.6
Other (cbt, school counseling, low investment self-help interventions, med evals, geriatric, executive coaching, community intervention, coaching, evts) 2.5

*Focus of Clinical Work, Treatments & Interventions*

Psychoses 13.8
Anxiety disorders 33.1
Depression 36.3
Bipolar disorder 21.9
Somatic problems 17.2
Eating disorders 20.6
Marital/relationship problems 29.1
Sexual dysfunction 14.7
Grief & bereavement 25.0
Disabilities and chronic illness 18.8
HIV/AIDS 12.8
Drug and alcohol problems 25.6
Sexual or physical abuse 26.6
Personal adjustment 31.6
Career/vocational concerns 17.5  
Other (spiritual issues, neuropsych, autism, personality disorders, behavioral disorders, trauma/domestic violence, motivation, parent training/family, academic interventions, stress, aging) 8.8

**Work Setting**

College or university 80.3  
Counseling center 12.8  
VA hospital 12.5  
Non-academic research facility 27.2  
Government agency 25.3  
Private industry 24.4  
Community mental health center 18.1  
Private practice 25.9  
Full-time consultation 10.9  
Other (hospital, inpatient facility, legal office, church, public school, consulting firm) 5.6
APPENDIX F

CORRELATIONS BETWEEN ATTITUDE COMPONENTS AND OVERALL ATTITUDE
<table>
<thead>
<tr>
<th></th>
<th>Overall Attitude</th>
<th>Professional Attitude</th>
<th>Personal Attitude</th>
<th>Rep. of Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Attitude</td>
<td>.79</td>
<td></td>
<td>.53</td>
<td>.55</td>
</tr>
<tr>
<td>Personal Attitude</td>
<td>.77</td>
<td>.41</td>
<td></td>
<td>.38</td>
</tr>
<tr>
<td>Rep. of Psychology</td>
<td>.82</td>
<td>.53</td>
<td>.39</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Lower Quadrant = Cognitive/Experimental. Upper Quadrant = Social. All correlations significant at p < .001. N = 315.*

*Figure 11. Correlations Between Attitude Components and Overall Attitude for Cognitive/Experimental and Social Psychologists*

<table>
<thead>
<tr>
<th></th>
<th>Overall Attitude</th>
<th>Professional Attitude</th>
<th>Personal Attitude</th>
<th>Rep. of Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Attitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Attitude</td>
<td>.85</td>
<td></td>
<td>.55</td>
<td>.64</td>
</tr>
<tr>
<td>Personal Attitude</td>
<td>.79</td>
<td>.51</td>
<td></td>
<td>.47</td>
</tr>
<tr>
<td>Rep. of Psychology</td>
<td>.81</td>
<td>.55</td>
<td>.43</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Lower Quadrant = Clinical. Upper Quadrant = Counseling. All correlations significant at p < .001. N = 315.*

*Figure 12. Correlations Between Attitude Components and Overall Attitude for Clinical and Counseling Psychologists*
LIST OF REFERENCES


